

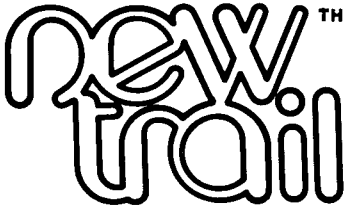
the university of alberta magazine spring 1971

new trail



in
this
issue:
the five
psychologies





OPPOSITE PAGE *Since 1915 the Arts Building has stood, then to break the horizon, now like an ivy-dressed fortress as the campus towers around it.*

Contents

- 2 SPECIAL REPORT: The five psychologies
 - 3 The long past, by T. M. Nelson
 - 5 The task of theoretical psychology, by J. R. Royce and Hinton Bradbury
 - 7 On training counsellors, by H. W. Zingle
 - 9 Psychology is . . . , by Katherine Govier
 - 12 Twenty years of student counselling
 - 13 A humane enterprise, by E. E. McCoy
 - 14 Student help, by Katherine Govier
- 17 Perspectives, a photoessay by Forrest Bard and Katherine Govier
- 20 AMONG OUR ALUMNI: Yuichi Kurimoto, by W. H. Swift
- 21 AMONG OUR STAFF: Art McCalla, by Henry Kreisel
- 22 CAMPUS REPORTER
- 29 DEATHS
- 30 ALUMNI NOTES
- 36 CAMPAIGN REPORT

New Trail

The University of Alberta, Edmonton, Alberta

Editor: William Samis

Advisory Committee: John E. Bradley (*Chairman of the Board of Governors*), Max Wyman (*President of the University*), Norman Lawrence (*President of the Alumni Association*).

Alumni Affairs Editor: Alex G. Markle (*Executive Secretary, Alumni Association*). *Assistant Editor:* Jeanette Rothrock. *Writer:* Katherine Govier. *Photographer:* Forrest Bard. *Illustrator:* Frank Hale. *Copy Editor:* Norma Gutteridge. *Production:* Adrienne Lent, Marjorie Olsen, Lea Watson. *Business Manager:* A. S. Knowler.

Published by The University of Alberta for its alumni and friends. *Editorial offices:* University Publications Office, telephone 432-4991. CONTENTS COPYRIGHT THE UNIVERSITY OF ALBERTA: requests to reprint material may be directed to the Editor. Set in Times Roman type and printed by The University of Alberta Printing Department.

National advertising representatives: Alumni Media Limited, 1350 West Pender, Vancouver 1, British Columbia, telephone 688-6819.

On (and off) the Trail

William Samis

A tour of the drawings of the massive cafeteria facilities proposed for a site somewhere vaguely adjacent to the Henry Marshall Tory Building has reminded me of the great spectrum of gastronomical experiences offered to sojourners at the campus.

There are undoubtedly a few genuine gourmets here, but I do not think the University can be accused of harboring them. They do not find refuge on the campus from the indignities they would suffer, for example, in the beaneries downtown. But if Escoffier cookery is hard to find, variety is not. The hungry can dine in a different place every day for a fortnight, and the adventuresome can probably extend that exercise to at least a month.

The traffic in vittles is heaviest in the University's five principal Food Service Outlets (to use the official phrase): two in the Students' Union Building, two in Lister Hall, and one in the Central Academic Building. The main dining room in Lister used to offer all you could eat, *prix fixe*, around a dollar for lunch or dinner. This didn't pay (obviously), but the idea of opening a snack shop downstairs did. Although its principal staple is pizza, it is called The Ship.

In the Students' Union Building, the snack bar seats 400, and the full-course cafeteria in the next room more than 800, but it is often hard to find a seat in either at mid-day. The old Students' Union cafeteria across the street (now a warren of offices) was always at least as crowded. The old place had a certain unpleasant drabness which the new one has avoided, but its great tradition as the lair of girl watchers, coffee garglers, and *Gateway* staffers has persisted in the new premises.

Lunchers filling their hope chests with the University's flatware will find little succor in the new Central Academic Building cafeteria (see page twenty-five) which is experimenting with plastic cutlery, paper plates, and make-your-own milkshakes.

There are no such economies in the Faculty Club, however, where everything is candlesticks and linen and a view of the sunset on the river valley. I once had a very fine beef Wellington there, and am told they now offer beer in large pitchers for those who thirst for other than knowledge.

Fancy beef and beer are not available from the host of vending machines in the basement of the Education Building, but almost everything else is. Vending machines, in fact, are *everywhere*, but only in two or three of the largest buildings do they offer what one might call a square meal.

The same sandwiches, soup, and chocolate bars are available in the various staff lunch rooms, except that here they are dished out (usually) by somebody's jolly grandmother. These are supposed to be sanctuaries from the students, but only in the Cameron Library do they actually beat students off at the door. In the teaching buildings, these places are on the top floor, with a view, fancy furniture, and fat broadloom. In University Hall, and the Administration Building, however, they have a corner of basement and linoleum tile.

My fondest memories are for places I have not visited since I was an undergraduate. Several of them (continued on page thirty-five)

the five psychologies



an art and a science
academic and experimental
THE DEPARTMENT OF
PSYCHOLOGY



learning about learning,
training clinicians and counsellors
THE DEPARTMENT OF
EDUCATIONAL PSYCHOLOGY



searching for meaning
in an ocean of data
THE CENTER FOR
ADVANCED STUDY OF
THEORETICAL PSYCHOLOGY



recognizing, understanding, serving
the human needs of individuals
lost in a massive enrolment
STUDENT COUNSELLING SERVICES



bridging disciplines
to find the causes, to try to help
THE CENTRE FOR THE
STUDY OF MENTAL RETARDATION

Compiled by Jeanette Rothrock
Drawings by Frank Hale



Five formal psychology departments exist within The University of Alberta. A decade ago, after fifty years union with the older discipline of Philosophy, the Department of Psychology emerged on its own. The Department of Educational Psychology came into being approximately the same time, with a different orientation and a different task. The Center for Advanced Study of Theoretical Psychology and the Centre for the Study of Mental Retardation, interdisciplinary bodies created in the sixties, grew out of these two departments. On the other hand, Student Counselling Services, while making use of the knowledge and the personnel of the other departments, arose from the needs of students in a burgeoning University. And now the students themselves have created an informal underground sixth psychology, Student Help. In this issue of NEW TRAIL we present a brief glimpse into each of these psychologies.

the long past

By T. M. Nelson

This fall the Department of Psychology began its sixty-second academic year of instruction. Few are left who know it to be one of the oldest departments in the University.

The fact is, however, that the first course was offered in 1909, barely one year after the University itself was formed. The professor was John MacEachran, who had been appointed that year to teach both philosophy and psychology. He had just received his second doctorate from the University of Leipzig, Germany, where he studied under the redoubtable Wilhelm Wundt, probably the most influential person in the history of psychology. Historians usually mark the beginning of modern psychology with the establishment of the very laboratory where Dr. MacEachran studied and worked as a student. Thus, not only was psychology present at the birth of a new University, but the new University helped celebrate the birth of a new discipline.

In the course of the establishment and the development of the Department of Psychology, five men served as Head or Chairman: Dr. MacEachran, John Macdonald (later Dean of Arts), Douglas E. Smith (now Dean of Arts), A. M. Mardiros, J. R. Royce (now Director of the Center for Advanced Study of Theoretical Psychology), and myself since 1967. All of these men are living in Edmonton and (allowing of course for age) are active in the department and University affairs.

The first piece of technical apparatus purchased for the department was the Hipp chronoscope, the standard device of all first rate psychological laboratories near the turn of the century. This carefully machined unit is the epitome of German

brass instrumentation and will work as faultlessly for the measurement of reaction time now as it did six decades ago. It was manufactured to specifications established at Leipzig and cost, Dr. MacEachran recalls, almost \$600 at that time. He also remembers the great difficulty he faced in attracting staff who could operate the chronoscope and at the same time who possessed academic qualifications and capacities for teaching at university level. By comparison, a modern electronic chronoscope costs about one quarter the price, ignoring even the declining purchasing power of the dollar, and can be operated simply and accurately by the turn of a screw driver to make the connections and the twist of a dial to set the timings.

In the fall term of the 1909-1910 academic session a single course titled "Psychology" was offered to nine students. Today's course listings occupy three and one-half double-columned pages in the *University Calendar* and attract thousands of students in Arts, Science, and other faculties.

The simple 1909 description of "Psychology" as "an introductory course in general and experimental psychology" can no longer do. The "bag" of the contemporary psychologist must provide knowledge about individual differences, social behavior, developmental problems, humanistic theory, test theory, psychometrics, creativity, verbal learning, alienation, multivariate research methods, human performance, motivation, behavior genetics, physiology, phylogenetic differences, industrial problems, psychopathology, drugs, and behavior . . . this is only a partial list.

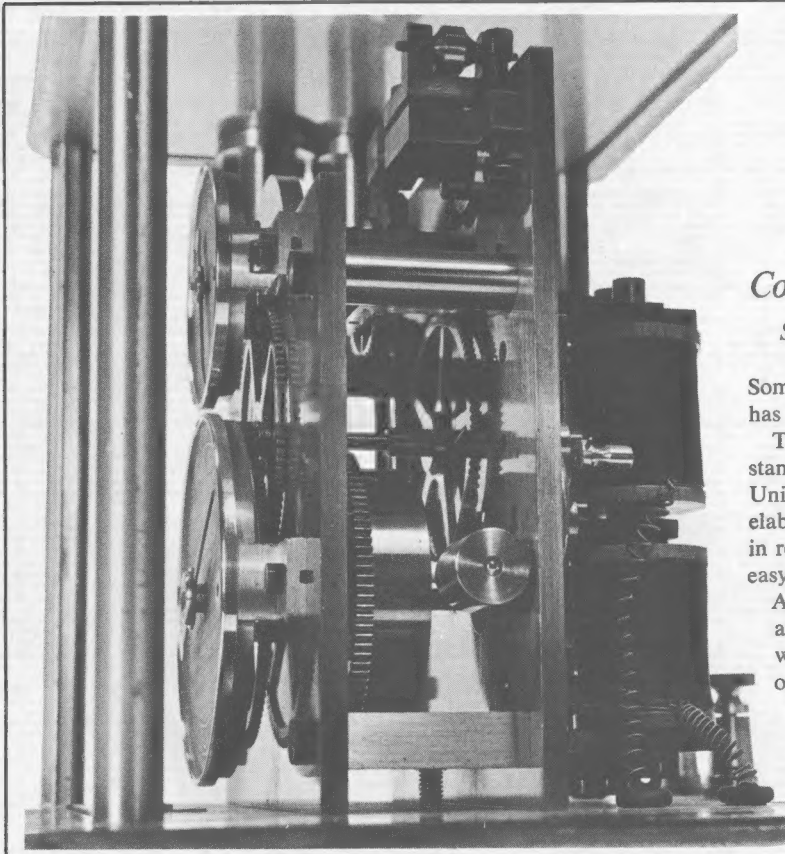
On that first day of classes in 1909, Dr. MacEachran

distributed copies of William James's textbook, *Psychology: Briefer Course*, to his class. This has been replaced by rows of general and technical treatises occupying linear yards of aisle in the University Bookstore. It is worth a professor's salary to own one copy of each of these contemporary offerings.

The facilities in the Psychology Wing of the new Biological Sciences Centre are among the finest available anywhere in the world and demonstrate the importance the people of Alberta attach to the study of Psychology. These five floors offer many exciting opportunities for learning and research. Controlled environmental chambers provide unique possibilities for climatic research. Sound-insulated cubicles, better than those possessed by many commercial recording studios, permit investigation into processes underlying judgments people make in the ordinary world. Rooms for clinical testing and practice give the best opportunity for undergraduates to learn diagnostic techniques.

In another place shiny stainless steel cages on wheeled racks stand, occupied by animals whose vocation it has become to display to the student of learning their versatility in solving problems.

In sensory laboratories brainwaves taken from the scalp of an observer are averaged by electronic equipment to show time patterns of brain activity associated with awareness of color and brightness in the world around us. Students and professors explore the humanistic and theoretical dimensions of psychology in pleasant seminar rooms; and on weekends in these same rooms groups participate in sensitivity training sessions. In still another



Complex to simple . . . simple to complex

Some of the paraphernalia of psychological education has not shown a consistency in its historical evolution.

The Hipp chronoscope (LEFT and RIGHT) was the standard device for measuring reaction time when the University started teaching psychology in 1909. This elaborate and beautiful brass clockwork has been replaced in recent years by a small electronic chronoscope, inexpensive, easy to run, but no more accurate than its predecessor.

Alumni who remember their psychology examinations as multiple-page, multiple-choice fact-searchers may wish to try their skill at the old examination on the opposite page. Dr. MacEachran's first students sat for it at the January mid-term in 1910. Their final included "Write a note on the imagination" and "Discuss the relation of thought and reality."

location partitions provide the social psychologist access to the transactions and communication forms employed in everyday social confrontments. And this is only a sample of the action.

Anyone bold enough to zoom through the history of psychology in such brisk fashion ought not to omit the future from his purview. The academic stature of the department here has gained international recognition. Course offerings are diversified but not redundant. Research facilities are good and the scholarly output of quality. Establishment of the Center for the Study of Theoretical Psychology assures that the theoretical and humanistic values are being represented here as at few other places.

The times demand more, however, and working goals must make room for broad and useful community service, interpretation of academic research and theory to problems existing in treatment and rehabilitation centers, training of practitioners to fit positions created by social legislation, and, finally, the possibility of supervised experience in methods of psychological assessment and counselling for those wishing to increase their skills in the discipline in an academically-based training center. Renewed integration of psychological research and teaching with problems of broad community interest is bound to have high priority in the years to come.

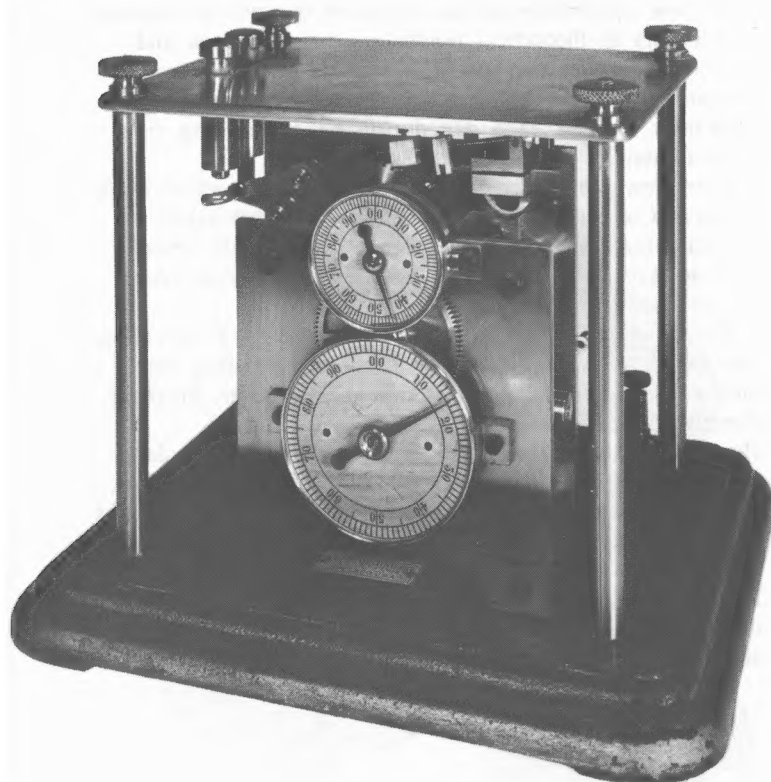
Thomas M. Nelson, Professor and Chairman of the Department of Psychology, joined the faculty in 1964. Previously he had studied and worked as a Research Associate in the fields of sensory perception and perception at Michigan State University.

the task of theoretical psychology

By J. R. Royce and Hinton Bradbury

The Center for Advanced Study in Theoretical Psychology was established to deal with basic conceptual problems in psychology. Among the major fields of research, psychology finds itself in an especially uncomfortable conceptual position. It is unclear to many where psychology is going and what has been gained by its early efforts. The confusion of direction that confronts the psychologist in his work is understandable, for it results from a staggering breadth of subject matter—all behavior—and from the youthfulness of the discipline.

Psychological work, as such, has existed for scarcely a hundred years. In that relatively short period, an enormous amount of experimental work has been done. The discovery of means to measure experience as well as apparently elusive human qualities such as intelligence, began a period of preoccupation with data collection, involving both the identification of things to be observed and the development of ingenious mathematical and



SECOND YEAR.

Psychology.

(Answer any six questions.)

Friday, January 28th.—Morning, 9.30—12.30.

1. Discuss the Greek conception of the soul. What is the conception prevalent in modern psychology?
2. Show how Plato's ethical and political theories are related to his psychology.
3. Explain Plato's theory of "ideas." Point out the difficulties involved in his theory and show how Aristotle seeks to overcome them.
4. Describe the construction of either the eye or the ear.
5. Show how by processes of vivisection the nerve centres of animals are capable of being specified.
6. How is habit to be explained physiologically. Write a note on the ethical and pedagogical importance of the principle of habit.
7. Discuss the appropriateness of the term "stream of consciousness." What is meant by the "topic" and "fringe" of thought. Explain and illustrate the selective character of consciousness.
8. Show how James analyses the "self as known."

instrumental measurement devices. This tendency, which started in the nineteenth century with psychological testing, psychophysics, and physiology, proliferated in other areas of research, such as social behavior.

In other words, a great deal of psychological data has been gathered in a brief period of time, and the tendency continues unabated. Yet virtually no attention has been given to assimilation of the data, to an overall understanding of what has been done. What do all the observations mean? What questions have been answered? What new questions are suggested? How do the disparate bodies of psychological data reflect on one another? Are efforts being spent to the best advantage? And has any light been thrown on the big questions psychology started with before it began travelling by the momentum of its own bulk?

This brings us to problems provided by the range of psychology's interest. Though it is the study of behavior, psychology is only one of many fields attacking that ungainly topic. Coming, as they did, late on the scene, psychologists inherited a number of perplexing problems from more experienced quarters, especially from the philosophers. What is the mind? Can a distinction be made between the mind and the body? How? Where and how does visual perception take place? What are the properties, such as redness, attributed to objects by perception, and where do these properties exist? These questions, and many more like them, have been around for centuries, but psychology has not; and so far the vitality of the young science has not been equal to the curve balls thrown at it by older disciplines.

The outcome of psychology's conceptual struggle is far from decided. The questions are durable and the field is young. The University of Alberta Center attempts to meet these problems head on. We are devoted to critical examination of the body of psychological work, especially its theoretical statements, and to the formulation of new theories. We run no experiments and, hence, create no new data. Instead we devote our efforts to synthesizing the mountains of data which have been gathered by others. There is no shortage of material for us to consider, and regrettably, we have very little competition in our efforts. We are the only Center anywhere devoted to theoretical as opposed to experimental research in psychology.

The belief that the problems of theoretical explanation in psychology can benefit most from conceptual analysis in depth and from interdisciplinary attention is reflected in our permanent staff, whose interests cover philosophy, computing science, and other areas in addition to psychology: J. R. Royce (Director of the Center), Professor of Psychology; W. W. Rozeboom, Professor of Psychology; H. Tennessen, Professor of Philosophy; T. Weckowicz,

Associate Professor of Psychology and Psychiatry, and K. V. Wilson, Associate Professor of Psychology and Computing Science.

In addition to the permanent staff of Center professors, five or so Research Associates and Post-Doctoral Fellows take residence with us for one or two years each. In most cases these people are recently graduated doctorate philosophers and psychologists.

The current research themes of Center emphasis are "The Contributions of Multivariate Analysis to Psychological Theory" and "The Psychology of Knowing." Various programs of study are devoted to the themes. The visiting scholar program and our Banff conferences are probably of greatest general interest.

Throughout each year, we sponsor visits to the Center by leading contributors to the areas of our current interest. Such visits are from one week to one month in length. In addition, there are occasional shorter appearances by visitors not involved in continuing Center work, but who are otherwise influential in psychological theory. N. Tinbergen from Oxford University, one of the founders of ethology (the scientific study of animal behavior), and Harvard philosopher W. V. Quine made presentations to the Center last year.

During his appearance here, the visiting scholar sits in seminar discussion of his work with the Center staff. The object is a no-holds-barred critical exchange between our staff and people who have made outstanding contributions to psychological research and theory.

The first seminar session held by each visiting scholar is part of the Center's Seminar-in-the-Round program. A Seminar-in-the-Round is a working session of the Center staff and visitor to which the public is invited. Though the program cannot allow the audience to participate in the discussion, these open sessions give the campus and public the opportunity to see some of the world's leading contributors to theoretical psychology hard at work and occasionally under the gun. The work is intensive. Stanford University neuropsychologist Karl Pribram held a three-hour seminar each day during his month-long visit to the Center.

Every few years, recent visitors to the Center whose work is relevant to the theme under consideration are asked to return for a week-long conference at the Banff School of Fine Arts. Papers presented at the Banff Conferences are collected for publication.

The Seminar-in-the-Round program and Banff Conferences may be of particular interest to the public, but they are only a small part of the work done at the Center. To those directly involved here, other activities seem to characterize the organization better, such as the regular Center seminars involving our staff, fellows, and students.

The Center's educational programs are aimed primarily at the post-doctoral and doctoral levels of study. In addition to our present PhD program in theoretical psychology, we hope eventually to be involved in a truly interdisciplinary degree program, one involving students who, like our staff, are drawn from various departments.

J. R. Royce, Professor of Psychology and Chairman of the Department from 1960 to 1967, has been the Director of the Center for Advanced Study in Theoretical Psychology since its establishment three years ago. Hinton Bradbury is Administrative Officer for the Center.

The Center gives the student the opportunity to present a theoretical, as opposed to an experimental, dissertation. In other words, the dissertation is not required to be a report of an empirical data gathering project, as is customary with psychology degrees. The Center regularly offers seminar courses in philosophy and psychology and in theory construction. A Center seminar course in humanistic psychology has been proposed for the 1971-72 school year, but has not yet been offered.

Center participants frequently make first presentations of theoretical papers at seminars before they are offered for general publication. This was the case with Professor Tennesen's paper, "Happiness is for the Pigs." It was later printed in the *Journal of Existentialism* in its 1966-67 volume, and gained wide notice. (A sequel, "Happiness is Strictly for the Pigs," appeared in the same journal.)

It is difficult to say what direction psychology will take in its development beyond scientific infancy, and it is similarly difficult to say when psychological work will coalesce to make much-needed contributions to a world in which the really dire problems are behavioral. Conceptual confusion and lack of theoretical integration are clear obstacles in the path of psychology's maturity. To many thoughtful people, jargon is the prime attendant to fuzzy thinking, and psychologists are among the consummate jargonizers of twentieth century academics.

The approach we take at the Center has two major aims: to provide theoretical synthesis of empirical research, and to clarify the philosophical foundations of the discipline. Until this is done, workable theory will be unattainable in our field. The significance of workable theory is that it has the potential of leading to solutions of practical problems (for example, a theory of mental illness that suggests cures, a theory of learning that facilitates education). The task of attaining such theory is difficult, but few will deny its importance for mankind.



on training counsellors

By H. W. Zingle

During the past two decades there has been a great debate about the essential nature of counselling. Some theorists have suggested counselling should be personal-emotional; others, that it should be informative-didactic. One expert says counselling should be client centred; others say it should be more directive. Some theorists propose that counselling should concern itself with the developmental aspects of students; others suggest counselling must assume a remedial role in the school as well.

Traditionally, the division of labor between counsellors and psychotherapists is analogous to "onion peeling." The counsellor's role is to deal with the outer layers of the "onion," leaving the inner core to the better-equipped psychotherapist. In other words, counsellors have been expected to refer clients whose problems are deep-seated and seriously maladjustive to the more thoroughly trained psychotherapists or school psychologists. Such an approach to counselling neglects the fact that it is a process which helps *whole* human beings cope with *total* life situations.

To say that counselling is essentially psychotherapy is not to deny the importance of vocational information in a guidance service. If the goal of counselling "is not simply finding a job which one can do and in which one can earn a living, but finding a vocation which is consistent with one's self-concept," then it is obvious that vocational counselling is a psychological task.

Far too much emphasis in the past has been placed on imparting to counsellor-trainees occupational information quickly obsolescent. Armed with batteries of tests, dictionaries of occupational titles, and parsonian attitudes about the counsellor's role in the school, the counsellor of the past greeted his clients confident that the proper information would cure all their problems. Somewhere in his education he failed to realize that he was dealing with human beings, each with a unique contribution to make to society.

Given counsellors who are inadequately trained to recognize and assist students with crippling emotional problems, it is no surprise that this function has been avoided. It is the responsibility of counsellor educators to produce counsellors with the knowledge to cope with all cases.

The ideal training program for counsellors first should consist of supervised experience in counselling, a practicum program designed to allow the counsellor-trainee to experience a wide variety of client problems. Second, a broader background in psychology, sociology, and the



humanities should be required of prospective candidates. Third, greater emphasis should be placed on abnormal psychology, psychopathology, developmental psychology, the sociology of work, and personality theory. Fourth, the personal suitability of the counsellor-trainee should be determined as soon as possible, because not everyone who applies for counsellor training is suited for the work. Fifth, formal or informal therapy for prospective counsellors would enable the trainees to experience the counselling relationship from the client's perspective, and would result in greater self-understanding. Sixth, certification as a counsellor should be given only those individuals who are competent both to assist the development of healthy individuals and to ameliorate the problems of disturbed students.

The counsellor training program developed in the Department of Educational Psychology at The University of Alberta reflects these attitudes to counsellor education. Because all candidates for admission to the program must satisfy the general requirements of the department and the Faculty of Graduate Studies, scholastic promise remains the basis for selection.

All counsellor-trainees receive credit in the same core of subjects as all other graduate students in the department. They must also enrol in half-year courses in vocational development and choice, group assessment in guidance and counselling, and a full-year seminar and practicum in counselling. An optional course is required to complete the program. This may be any course which the student feels is relevant to his program. Often students select a course in child or adolescent psychology,

H. W. Zingle, BEd '56, MEd '60, PhD '65, is Professor of Educational Psychology and Co-ordinator of Clinical Services for the Faculty of Education. He is responsible for the graduate training program in counselling and guidance.

problems in reading, diagnostic testing, or the sociology of the family.

The practicum is designed to allow the trainee experience in the University clinic and in a field setting. During the practicum in schools or agencies (half the academic year) the trainee is assigned to a co-operating counsellor in the school who oversees his work. Throughout the year the trainee has regular sessions with a consultant at the University. In these sessions audio and video tapes of the trainee's interviews are played, problems are discussed, pertinent issues are raised. Thus, each counsellor trainee has the benefit of the professional experience of at least two consultants in the practicum program.

Seminars are held each week to present case studies, to provide an ad hoc group counselling environment, to allow critical assessment of each student's progress, and to encourage greater self-understanding and self-acceptance on the part of the counsellor-trainees. The trainee-consultant relationship usually becomes almost a counselling relationship.

Trainees are candidates for the master's degree and therefore must complete a thesis in a relevant area. The program assumes that counsellors should be trained sufficiently in research procedures to be able to initiate and carry out research programs in the school system.

Evaluation of a candidate's progress is considered from two points of view: his academic competence as determined by his course work, and his counselling effectiveness and suitability as determined by his practicum experience. All co-operating counsellors and consultants provide an evaluation of the counsellor-trainees working with them. Since course work and practicum are under the direction and administration of two different persons, a "halo" effect is at least partially avoided. Thus, a student with very high academic standing but poor practicum performance will not necessarily be recommended for work in the schools, although his work would satisfy requirements for the master's degree. On the other hand, an excellent performance in the practicum might outweigh a mediocre academic record.

Obviously, a two year program cannot provide intensive training in all skills. The bias of the Alberta program leans toward training in effective interpersonal relationships. If some aspects must be soft-pedalled, it is assumed that the victims will be those areas relating to the informational aspects of counselling, which are amenable to independent research and to acquisition on the job and in internship programs.

The special skills relating to an effective one-to-one relationship with young children and junior and senior high school students are not likely to develop adequately on the job, untutored and unsupervised.

The first prerequisite to good counselling, though, is a psychologically healthy counsellor who can relate to both children and adults, who projects a warm, understanding feeling to his clients, and who has the necessary experience and background to cope with the developmental needs of the majority of students and the remedial needs of the minority.

psychology is

By Katherine Govier
NEW TRAIL Staff

What is psychology? The study of human behavior? The broad scope of the subject makes definition difficult. Perhaps psychology is best represented by its breadth—the diversity of research, the manifold approaches taken to come to terms with the complexity of human behavior.

DETERMINING THE CANADIAN PERSONALITY . . .

When coaxed, Edgar Howarth, Professor of Psychology, may let you see the fruits of his labor. He will draw out a roll of eighteen data sheets, numbered over every square inch. "These represent 6,000 hours of objective testing, 600 subjects tested for ten hours each for various psychological characteristics, anything from reaction time to musical ability to physical fitness. This is only the beginning—now it must go into the computer."

For three years the Howarth personality group has been testing for the largest questionnaire research project to date. "We are trying," Dr. Howarth explains, "to develop a Canadian personality questionnaire working in the Canadian context rather than the British or American as have most previous psychologists."

To supplement his physiological, or objective data, Dr. Howarth is collecting personality information. "The first, 1,500 questionnaires will be sent to high schools and universities across Canada to give us a standard sample for comparison. Next year we will tap other sectors like the government and the armed services. The test will be

translated into French, and given to various other cultures." Typical questions ask the subject to describe his feelings about certain words, certain situations, what kinds of things he values and dislikes.

"We will see what personality factors are operating. We hope to define these factors by correlating questionnaires and objective tests. Our purpose is to predict behavior at double the present level of accuracy." Personality tests are used in education, counselling, employee selection, the armed forces, and also in clinical psychology.

The strength of Dr. Howarth's survey will be its extensiveness. He is measuring almost every possible characteristic to find the common strains in Canadians. "I foresee about twenty factors representing themselves through this research," Dr. Howarth says. His task is to refine and interpret the masses of preliminary statistics.

FINDING THE KEYS TO MEMORY . . .

Willard Runquist, Professor of Psychology, is another avid data collector. "I'm working on memory," he begins expansively. "I started on learning, but from there I moved on to memory. How people learn is learning, but what they've learned is memory."

Dr. Runquist defines different remembering situations. "Free recall, unorganized impromptu memory, is different than 'cued recall' or recall of a specific item of information with the help of reminders.

"The key in remembering is the cues that were present at the time of learning. The cues present, however, are not necessarily those used for recall. We have found that the memory codes information, or transforms it." For example, the answer to a mathematics question may be stored somewhere with sensual information of the smell of the leafy trees under which the person read his notes.

"We try to trace information from the time it is presented until it is recalled, using techniques initiated as far back as 1885. The tests are simple experiments; a subject is asked to recall word pairs, synonyms, nonsense

Edgar Howarth



Willard Runquist



syllables." The psychological process of memory, the operating characteristics, are basically the same for all humans. The factors can be classified generally as auditory, visual, and semantic. By interfering with one of these factors, for example, by creating confusion by similarity in sound, in the look of the words, or giving all meaningless syllables, one can estimate the extent to which that particular factor is used.

His findings enter the gigantic pool of acquired memory data. "Fifteen years ago," Dr. Runquist says, "when I began to work on learning, the field was very esoteric. The only theory had been developed from animals. It was around 1960, when the questions that people asked began to change, that we moved ahead."

"We need to be continually developing new techniques and observing new phenomena. Animal study is important—since humans are animals we need to study the characteristics of living systems. But the human memory is fascinatingly opaque, and to study animals because they are less complicated is to avoid the real challenge."

... AND MICE ?

Animal study is important to many psychologists. A tour of the "mouse house" shows the care which goes into selective breeding and testing of rodents.

The rooms are white, and clinically clean, with a very faint mouse odor. There are rows of wire cages labelled with the strain, sex, and date of birth of their inhabitants.

"We're good to our mice," says Wayne Poley, Research Associate for the Department of Psychology. "We have ten strains inbred to be genetically identical. It's a system like pedigrees, for example, some strains have one hundred years of brother-sister inbreeding behind them. By crossbreeding we get 'hybrids' which may result in 'overdominance' in the offspring—that is, the offspring will surpass either parent in certain characteristics.

"The mice are part of a project on emotionality; fearfulness in response to mild stresses, curiosity, general activity, and related psychological variables.

"It is sensible to study emotionality in mice. The determinants of emotional expression, the biochemical, genetic, experiential factors are the same as in people, although the expression may be very different." These expressions are tested in mice through behavior in open space and reactions to stimuli.

"Many people fail to realize that evolution applies to behavior as well as to physical aspects. People who would readily generalize from animal physical characteristics to human characteristics are reluctant to generalize from animal behavior to human behavior," Mr. Poley continues. "Structurally, emotional mediators have a long evolutionary history. There are great similarities in mammals right up to humans. In studying emotionality we use mice since we can't standardize people or control their environment. With mice we can isolate factors by making environment and genetic makeup constant within a strain."

Studies are in progress concerning the effect of early experiences on the behavior of mature mice. Alcohol and drugs are being tested for their effects on mice with genetic differences. It has been shown that arousal at critical periods has permanent effects on behavior. With data from hundreds of tests the experimenters build theories which help to explain not only animal, but human behavior.

TESTING YOUR OWN THEORY . . .

K. Dabrowski, Professor of Psychology, feels that conflict is healthy. His theory of "positive disintegration" holds that periods of emotional and intellectual development are characterized by conflicts that should not be mistaken for psychoneuroses. Disintegration is a normal stage of development.

Marlene King, Research Associate, and other researchers are developing a test battery for the theory. They have tested persons at Alberta Hospital, Edmonton, samples of the general population, students, and firemen.

According to the theory there are four levels of development, from infancy through to psychological maturity. The first stage is conflict-free; the person at this level is decisive and unquestioning about himself and his environment. The following stages involve external and internal conflicts to a level of secondary integration, where he is more at peace with himself. In the interim periods, (disintegration periods) he experiences "growing pains" as he finds the source and resolution of his conflicts in himself.

In the tests subjects are asked to describe feelings triggered by certain words and images. Dr. Dabrowski, a medical doctor as well as a psychologist, gives a neurophysical test for reflexes and skin sensitivity. With these tests they hope to determine whether there is a relation between the level of integration and the physical characteristics.

Dr. Dabrowski wishes, in testing his theory, to determine factors which cause people to maintain one level of development or another. He plans to compare therapeutic practices in use, and eventually to implement his ideas in a treatment centre for disturbed persons.

Nowhere to run. Hermann Schwartz, one of the most respected mice in the group, considers solutions to his anxieties due to exposure in the "open field," a relentless white table-top, marked like a graph to record his movement.



HOW THE EYE SEES . . .

Humans and animals are equally important in the work of Charles Bourassa, Associate Professor of Psychology. He is studying sensory psychology and perception. He works with animals and humans—using cats to study how the sense systems are activated, and humans to discover how we relate to the world through our sense organs, chiefly the eye.

One way to study how humans process information is to work with “cortical evoked potentials.” The nerve stimuli from the eyes are recorded by means of electrodes and “averaged” in a computer so that the wave length changes occurring with stimulation of the eyes can be seen. In cases of amblyopsis, or lazy eye, which occurs frequently in children, it is possible to see whether the eye itself is not sending messages, or whether the information is stopped in the brain. The waves do not show potential in a lazy eye, which means the eye is simply not reacting. When a patch is worn over the good eye, the lazy one recovers. Cortical evoked potentials can be used as test procedures to see if people who cannot communicate have normal perception.

A problem in psychology is the perception of muscle stretch—can we feel a muscle move? Evoke potentials are used to test this discrimination of stimulus, to determine what we can and cannot feel. Inputs of sensation go to different sub-cortical areas, for example, skin sensations go to the reticular areas. The evoke potential tests point to the different parts of the brain that must be activated for the sensation to be experienced.

Before 1969, Dr. Bourassa worked at a research centre at the Good Samaritan Hospital in Portland, Oregon. “I decided that with all the studying I had done, I should be teaching. I find the classroom stimulating—students open doorways by questioning the ways we look at problems.” At present, Dr. Bourassa is trying to develop techniques to make introductory psychology courses more pertinent to his students whose fields vary from nursing

to engineering to agriculture. “Teaching takes most of my time, and I enjoy it.” Charles Bourassa has achieved an enviable balance in academic life.

TAKING RISKS . . .

Brendan Rule, a social psychologist, has chosen several specialized areas of research. She studies aggression as well as “decision-making under risk conditions.” Beth Percival, Research Associate with Mrs. Rule, speaks about the risk-taking studies.

“By subject-testing we study the cognitive and motivational determinants of risk-taking. For example, what would be the effects of arousal on decision-making, or the effects of boredom?” In experiments, conditions are manipulated. The subjects are aroused by challenging or frustrating tasks, or they are bored by being unoccupied or by complete deprivation of the senses.

“We have been using almost exclusively the gambling situation. We are trying to avoid this now, since it is not entirely realistic. We will be using simulated courtroom cases where subjects are asked for judgments, and also situations where money is actually won and lost.

Mrs. Rule started her research in the early 1960's in the general area of decision-making. She was led to her present project by an interest in the risky-shift effect; that is, the fact the people in groups are inclined to take greater risks than individuals alone. There are two main schools of thought concerning group risk-taking; one is that group liability gives each member more daring, another is that excitement generated by the group gives this effect.

Some conclusions have been reached, although the study is by no means complete. The researchers believe that extreme arousal and lack of stimulation cause greater risk-taking. They have also noted differences in situations which involve skill and those that are governed by chance.

Psychology is all these projects and more. To study psychology is to question, to try to solve problems in human behavior in the way which seems most valuable.

K. Dabrowski



Charles Bourassa



twenty years of student counselling

Student Counselling Services at The University of Alberta originated largely as a result of the returned war veterans who flooded the campus in the late forties.

Prior to and during World War II, guidance counselling—counselling on career choice, study methods, and so on—was a matter between the student and his professor. After the war a Consultants' Committee was created which added a degree of formalization to the system without really changing it.

Toward 1950 the idea that the methods of selecting and counselling students ought to be improved became more current and the weaknesses of the consultant systems became more obvious. The whole matter of student counselling was reconsidered and the result was Student Advisory Services.

The Student Advisory Services were set up for the purpose of providing "guidance" for the student and advice for his faculty. Today this is only a part of Student Counselling Services, but still a very necessary part. Prospective students come to Counselling for information about university life and for help in choosing courses of study in line with their particular aptitudes. Students who wish to change faculties or to withdraw from University altogether are sent to Counselling to consider whether they are making the right decisions.

Students with poor academic records are not just asked to withdraw. Rather, their dean sends them to Student Counselling to find the reasons why; sometimes the student's abilities are not up to the demands of university work; sometimes he simply chose the wrong studies for his own talents. Sometimes, oftener than one might imagine, there are deeper personal problems at the heart of the academic troubles.

Getting to the heart of these deeper problems is the other part of Student Counselling Services.

A. J. B. Hough, Director of the Services since 1964 and a counsellor at the University for some fifteen years, sees the move into a therapeutic role and the corresponding improvement in the quality and training of the counsellors as the most marked changes in Student Counselling over the years. His task is to maintain the tricky balance between the two roles of guidance counselling and personal counselling.

While the guidance and service function still is vitally important, more and more students are coming to

Counselling for help with personal troubles. The reason is not that there are more students with problems, but that students are beginning to trust the Services. The word has got out that Student Counselling is more than a raft of psychological tests and mimeographed study guides, that the counsellors are neither "shrinks" nor administrators with pat answers. The counsellors admit they have no answers; their business is guiding students to find their own.

What sorts of personal troubles do students bring to Student Counselling? One of the most frequent is alienation, loneliness, and a feeling of insignificance on a large campus. (This fall there are almost 20,000 full-time students, plus several thousand professors, support staff and part-time students.) To the lonely student the counsellor's open door and his willingness to listen are therapy enough. For many students the years at university mean a change in values and in cultural milieu, and the counsellor has to deal with the uncertainties that accompany the change. There are problems with parents who can no longer communicate with their newly grown-up children, who don't know how to release the old parental controls and who try to enforce them long after they should; often the parents themselves call Student Counselling to ask advice. Whatever the problem, Student Counselling is there with strictly confidential help for those who need it.

Student Counselling and Student Health Services, while completely separate, work in close co-operation. Often a deeply disturbed student may be referred to Student Health for medication so that he can function more normally, continue to attend his classes, and carry on his studies while he receives therapy from a counsellor. Conversely, the student who has come to Student Health Services for medication frequently is referred to Student Counselling. When a student's hang-ups are more than the counselling psychologists can manage, when the student may be dangerous to himself or to others, he is referred at once for psychiatric care through the Student Health Services.

Whatever their problems, personal or guidance or "the dean sent me," about five thousand students came to the Counselling office in the Students' Union Building last year. This year there will be more. As on all large campuses the demand for counselling services grows faster than the increase in student population. The eleven counsellors on staff worry that their case load will get too far ahead of them. In Student Counselling it could be disastrous to say "come back later."



a humane enterprise

By E. E. McCoy

The complex, interrelated problems of mental retardation, its causes, prevention, and amelioration, cannot be handled effectively by any one discipline or profession. Co-operation is useful in any field but essential here, co-operation both in research and in training.

With this in mind, the Centre for the Study of Mental Retardation was established three years ago under the joint auspices of the Canadian Association for the Mentally Retarded and The University of Alberta.

The Centre exists apart from the University's usual departmental structure and acts as a bridge between specialists in various disciplines. The purposes of the Centre are two-fold: collaborative research, both basic and applied, and with emphasis on retarded young children; and collaborative training of specialists who may communicate across disciplines and work more fully as a team.

The Centre is divided into three closely interacting units for research and training in the three fields of education, behavioral and social sciences, and medicine.

The behavioral and social sciences unit is under the direction of J. P. Das, Professor of Educational Psychology with a joint appointment in the Centre. The unit studies the intellectual, emotional, physical, and social development of retarded persons as compared with normal persons. This is the most prolific unit in terms of published research covering the broad range from learning processes to personality to concepts of social status in retarded children. One of the questions under study right now is how socio-economic status may be related to intellectual development. Here researchers are trying to assess the expectations of parents regarding their children's progress in school, and to study personality traits of parents and children in deprived and normal social circumstances. Another project deals with attentional and verbal deficiencies, two common features of retarded children's learning

disability. Yet another is an attempt to identify intellectual abilities that are not shown in standard intelligence tests.

One very important factor in this type of research often is ignored. Because of their ingenuous view of themselves and their world, the retarded offer unique opportunities for basic research in psychological and social growth. Investigations into mental retardation are in fact probes into the basic nature and needs of all human beings.

Educational research under the direction of D. R. Cameron (until last summer Director of the Centre) involves individual attention to each retarded child. Retarded persons can learn. The need is to determine each individual's specific learning disabilities and to apply clinical teaching techniques.

One major project of this unit is an early education program for young mongoloid children, from three to six years old. This involves small-step tutoring programs for each child, instructing him in sensory motor activities, in language development, in getting along with others, and in self-help skills such as dressing or hand-washing. The children are very closely observed and are rewarded systematically when they respond correctly. The role of parents in training the children is being investigated too, through seminars and active participation.

The biomedical unit has begun its work only within the past six months. Its major emphasis is the study of the biochemical basis of mental retardation.

During work with retarded children in the educational or behavioral experiments, measurements are taken of physiological changes that may correspond with attentional or verbal behavior, such as changes in heartbeat, brainwave, or biochemical substances of the body. Eventually measurements like these may provide more reliable means of diagnosis and assessment than now exist. They also may provide a key to the physiological bases of retardation and lead to medical ways of improving the lot of the mentally handicapped.

Depending on how one defines mental retardation, there are from 45,000 to 200,000 retarded persons in Alberta. In an effort to meet the needs of these people the Centre has ambitious plans to expand its staff and improve its facilities over the next five years. Now there are five

During a speech instruction session, Centre staff member Susan Norton and her little pupil learn together, with the help of some popcorn judiciously meted out. Work with children is the Centre's major focus in both training and research.



faculty members working part-time at the Centre, plus three part-time graduate research assistants. In addition, graduate and undergraduate students often are assigned to the Centre. They offer considerable help with the research and with the retarded children, and at the same time gain experience and insight into the problems of the retarded child. The Centre's "five-year plan" is to have four full-time research and/or clinical specialists in each of the three units and one and one-half full-time research assistants for each specialist, engaged in both training and research.

By focussing on the study of unsolved problems in the field of mental retardation the Centre staff believe that contributions can be made that will benefit the University and the people of Alberta. Some 4,000 retarded children are in special classes in public and private schools and government agencies in this province. There is a strong move toward expansion of these facilities and the funds supporting this are considerable. But there remains a problem: there is little scientific evidence that these endeavors in special education are of any real benefit to the retarded. Evaluation of present services is urgently needed.

For this reason the Centre proposes to expand its educational unit to develop improved approaches to teaching and rehabilitating mentally retarded children. The expanded unit will have two specially equipped laboratory classrooms for children drawn from local public and private schools (though research studies also would be conducted outside the unit in such places as the Winnifred Stewart School, Glenrose Hospital, and public schools).

The behavioral and social sciences unit will enlarge both its research and service function, with the latter becoming a diagnostic and treatment centre for selected cases from the surrounding communities.

The biomedical unit will expand its research into causal factors and how they work to produce retardation. In addition it will develop as a training centre, for nutritionists, nurses, and later physicians. There is a shortage of physicians interested in the diagnosis and care of mental retardation, and for those who are interested there is no place for further training. The Centre's staff hope that in five years or so it may begin to fill this need which exists in all areas of research and training in mental retardation.

The reasons for doing work like this are obvious: the vast sums of money involved in caring for the retarded, a social concern for their wasted potential, and simple human compassion. These are the reasons for the existence of the Centre for the Study of Mental Retardation, and these are the reasons why its staff are determined that it will grow into a major research, training, and treatment centre in the near future.

Ernest E. McCoy, BSc '47, MD '49, Professor of Paediatrics, is the new Director of the Centre for the Study of Mental Retardation. He succeeds Donald R. Cameron, BA '34, MEd '60, who is on sabbatical leave.

Student help

By Katherine Govier
NEW TRAIL Staff

"Student Help" is depicted by a question mark. A telephone number is listed on posters and in *The Gateway*. What is the significance of Student Help?

Student Help is more than a telephone number and more than its insignia, the query.

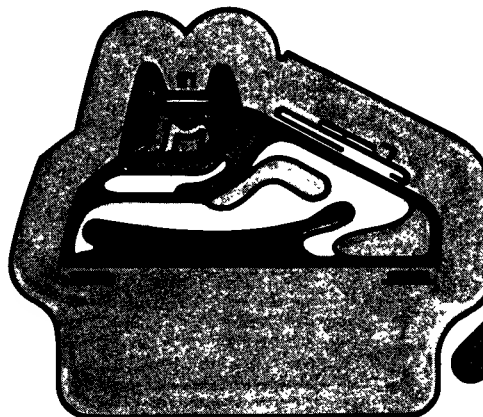
It is, in the words of Director John Cann, a graduate student in the Department of Educational Psychology, "for students by students . . . an organization as broad as your problems." It is a six by ten foot room in the Students' Union Building, crisscrossed by telephone wires and wallpapered with lists of names and organizations. If there is a telephone ring or a knock on the door, the room will suddenly come to life.

The voices appealing for help are anonymous. One wants to know what's happening on campus that night, another is trying to find a place to live, and the next simply wants someone to talk to. Sometimes, more often than one likes to imagine, a student is thinking of suicide. Whatever he wants, Student Help tries to give suggestions.

"Suggestions," John Cann repeats, "because that is all we have. There are no solutions except those from inside."

"If this is psychology," he continues, "it is everyday psychology on an even basis with another person." When the volunteers who comprise Student Help confront their peers in person or over the telephone, they are creating a point of contact for fears and frustrations that are common to university students. Their type of aid, peer group contact, is unique. The organization depends for its effectiveness on a casual reputation for sympathy and competence. It must be non-official and non-bureaucratic. Students who normally would be wary of counsel find Student Help approachable. To understand how they work it would almost be necessary to spend an evening in the Student Help office.

7:00 Two volunteers arrive for duty. They take out their books and begin to study.



7:45 T
a
After ea
This time

8:00 A
g

9:00 A
c

a while
or worki
suffer. F
departme
though t
but I thi
He really

9:10 A
li

9:30 A
"

made; th

11:30 A
to

helper li
hangs up
jumps at
The first
on the s
interacti
confiden
and I th
how—I j

12:05 C
is
sympath

And t
separate
academic
that wor
success
the cour
concerne
counsell
troubled
We tackl
the hidd
are nece
relieves
counsell
probes a
to comm
others we

By pra
in aiding
feeling t

7:45 The phone rings. One answers, the other listens on an extension. They scribble notes to each other. After each call, an entry is made in the office notebook. This time it is a blank call.

8:00 A caller wants information about CUSO. He is given a name and telephone number.

9:00 A student is having difficulty with his French course. The helper sympathizes, talks with him for a while about the relative merits of withdrawing, failing, or working so hard on the course that his other marks suffer. He gives him a number to call in the French department. By the end of the conversation it sounds as though the student will drop his course anyway. "Too bad, but I think he had his mind made up before he called in. He really wanted sanction. I am not sure if I helped at all."

9:10 Another blank call. The two students are feeling a little shaky. What a wasted night.

9:30 A girl wants to be read the Eighteenth Psalm "Oh Lord, how long will you forget me?" A note is made; there will be a Bible there the next night.

11:30 A boy from residence calls. The girl worker talks to him for almost half an hour, with the other helper listening and writing notes. She is jubilant when she hangs up the receiver. She cannot say much, but she jumps around the office and finally scribbles: "I did it. The first one I've really made happy. We functioned on the same wave length. Main problem: human interaction. I would say a bit of encouragement and confidence building was necessary. I got to a lot of problems and I think I helped them all. There's no way of saying how—I just did it. Yippie!"

12:05 One last call as the office closes. It is a girl who is pregnant. She speaks briskly, she does not want sympathy. She is referred to two professional sources.

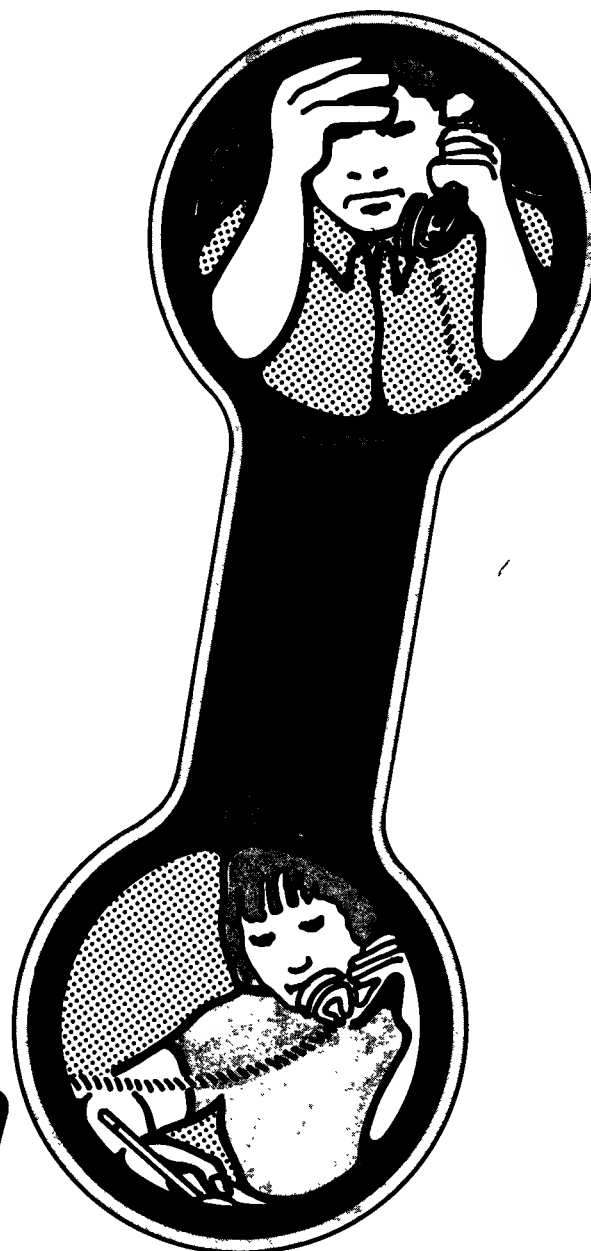
And the night is over. In about ten calls, many of the separate sources of Student Help, medical, legal, academic, and personal, were called upon. The contribution that workers are making is unique, it is undefined. The success of each interview depends almost entirely upon the counsellor and his method. This is why Mr. Cann is concerned about "the art of counselling." He and his counsellors discuss tactics for coming to terms with troubled people. "I like to call it the 'hit and run' method. We tackle the problem as it is presented, turning it to see the hidden roots. During this process, momentary escapes are necessary; for example, a neutral, humorous remark relieves tension. This gives the caller a chance to assess the counsellor and recognize himself. Then the counsellor probes again, and the cycle continues. We look for cues to common, basic problems; similarities to our own, or to others we've encountered."

By practicing and listening, the volunteers develop skills in aiding others. Sometimes they have the satisfaction of feeling that they have been useful, but often there is

no means of knowing whether they are helping people. One means of defining the accomplishment of Student Help is what Director Cann calls "feedback."

"We never get enough of this. Just a call that tells us 'the man you referred me to really knew what to do,' or 'your suggestion just led me into more trouble,' is worth a lot of time and effort."

Tangible signs that Student Help is helping students are notes under the door saying thanks, or donations for the organization's floating fund which come in sometimes from grateful students. But the real evidence of the value of Student Help is not so obvious. It is found in the counsellors themselves. Ideally there is growth from both ends in a group such as this. The volunteers find that they are solving their own problems, and are becoming more useful as people, while they make the effort to understand others.





Perspectives

*From inside to beyond
space is divided
with counterpointing patterns, dark and light
a building must imprison by its strength.*

*A free expanse within walls
and a path of lights to the doorway,
a building lies in stillness, undiscovered.*



Pictures by Forrest Bard

Words by Katherine Govier

The Biological Sciences Centre, which was occupied in the fall of 1970, is a massive addition to the campus skyline. It was three years in construction, and cost over \$20 million. The building is more than three times the size of the Henry Marshall Tory Building. There are six wings, with a total of almost 600,000 square feet of floor space. The Departments of Psychology, Genetics, Zoology, Microbiology, Botany, Radio and Television Services, and the Boreal Institute are housed within its walls. The appearance of the huge "fortress" has been the subject of much discussion—many find its rather medieval style unattractive. From human perspective, the Biological Sciences Centre is almost incomprehensible. But those who look for beauty in the building may find, as did our writer and photographer, that it creates its own perspective within its paradoxes of space and enclosure . . . that if the building looks ugly, it is only because it is greater than we are.



*Yet there is motion at the edges
the walls rise, stretch, their leaning shadows
only glance to what grows beneath.*

*And above
in a wide band of light
there is greenery under a glass roof
the walls are the edges of a world
the face is open to the sun.*



*From our perspective
it is a massive rocky thrust
angled against itself
yet in itself
the building is harmony
its power is in totality
its walls are the edges of a world.*





Father and son in the bleachers at Homecoming '70

AMONG OUR ALUMNI

Yuichi Kurimoto

By W. H. Swift

The first Japanese citizen to graduate from The University of Alberta did so in 1930. He was Yuichi Kurimoto, who obtained a degree of Bachelor of Arts with concentration in psychology.

He came to The University of Alberta because of a conversation with a Canadian ship's doctor. Dr. Kurimoto, then a student in Kyoto, had planned to further his studies in the United States, had made all the arrangements, and even had admission to an American university. But that was 1926, and he was blocked by the stringent new American immigration restrictions. Why not come to Canada, said the ship's doctor. By chance, Henry Marshall Tory, then President of The University of Alberta, was a passenger on the ship. The ship's doctor explained the Japanese boy's problem to Dr. Tory, who promised to do his best to have the boy enrolled at his University.

During his years at the University Dr. Kurimoto stayed in St. Stephen's

College, where he formed many life-long friendships. He recalls the problems which faced a Japanese whose knowledge of English was somewhat marginal. A course in German taught in English necessitated putting German into English and then into Japanese for a complete understanding, and then the reverse. The results were sometimes a bit grotesque. He recalls also the kindness of many people towards him, and especially E. W. Sheldon, the Professor of Mathematics known to two generations of students. When he visits Edmonton, Dr. Kurimoto customarily visits the grave of Dr. Sheldon to pay his respects.

Returning to Japan after his graduation, Dr. Kurimoto taught for three years in a private language school and made preparations for the establishment of the Nagoya Railway School, which opened in early 1935. This was a school intended to prepare boys for careers in the Japanese National Railways. A new school system introduced by the occupation forces after the war transformed the railway school into a senior high school.

The present Nagoya Commercial University, of which Dr. Kurimoto is President and Chairman of the Board, was founded in 1953 and maintains a close affiliation with the original high school.

From 1956 to 1960 he served as a member of the Nagoya City Board of Education, and was Chairman of the Board from 1958 to 1960. At present he is a Trustee of the Japan Private University Association and Vice-President of Aichi Private University Association.

In 1963 he was awarded the "Ranju Hosho" from the Japanese government for "conspicuous contribution" to Japan in the field of education. The award was presented by the Emperor and Empress.

In 1965, The University of Alberta gave its alumnus an honorary LLD. Dr. Kurimoto and his wife came to the campus for the occasion. With him he brought an interesting and comprehensive gift of books which he presented to the Library, books in English printed in Japan.

When the students of Nagoya Commercial designed a school pin they incorporated in it a maple leaf in recognition of the fact that their president had graduated from a Canadian university.

Dr. Kurimoto's original campus and buildings in Japan have been outgrown and have become surrounded by an expanding city. He has secured a delightful site with rolling hills and small lakes north of Nagoya in a village called Higashi-Shirakawa-mura, Dr. Kurimoto's birthplace. Here a new campus is rising, its architecture reminiscent of Simon Fraser University in British Columbia.

Dr. Kurimoto paid a surprise visit to The University of Alberta this summer. Japan sent a team of wrestlers to the international wrestling competitions held on the campus. He was chosen to be titular head of the delegation, although he disavows any prowess as a wrestler. On this occasion he again brought a substantial gift of books. With Mrs. Kurimoto, he visited the University again in the fall for the Homecoming celebrations.

In September, Dr. Kurimoto's son, Masahide (Mike) registered as a student in Business Administration and Commerce. Like his father more than thirty years ago, he too is a Stevite.

W. H. Swift, BA '24, MA '27, BEd '30, LLD '68, is a former Chairman of the Universities Commission and a friend of Dr. Kurimoto.

Art McCalla

By Henry Kreisel

In the fall of 1951, the Studio Theatre staged a performance of Chekhov's *The Cherry Orchard* in which I played the part of Lopakhin. Some time during the run of the play a man whom I did not then know happened to stop me in the Arts Building. He said that he had seen the play and had liked it. He then began to talk about the production in a most knowledgeable way. He analyzed the central ideas in the play and speculated on the motives of the main characters. He was critical of some of our interpretations because they seemed to him to violate some of the central conceptions underlying the play. We discussed some of the points he had raised, and after about twenty minutes we parted.

I was impressed by the man because he was obviously deeply interested in the interplay of ideas and in the theatre as a place in which serious subjects could be seriously presented. His manner of speaking was without embellishment, almost blunt. But like well-placed arrows, his sentences came straight to the point. I think he assumed that I knew who he was, though I had in fact not met him before.

It was at a meeting of the Staff Association in the spring of 1952 that I saw and heard him again, and then realized that he was A. G. McCalla, the Dean of Agriculture. He addressed himself to questions of the moment with the same incisiveness, the same acuteness with which he had discussed the Chekhov play. He certainly shattered the image I then had of what a Dean of Agriculture was like. (The less said about that, the better!)

First impressions are often misleading, but the first impression I had of Art McCalla as a man who possessed great analytical power and a sharp, incisive mind, and who expressed himself very clearly, very strongly, and very decisively, has only been strengthened and deepened in the nearly twenty years that have passed since our first meeting.

There is another moment that illuminates

for me something of the character of the man. It was in the mid-fifties, at a meeting of the General Library Committee, a large committee which no longer exists, but which at that time used to meet twice a year to chart general policy for the development of the Library. This was a period when funds for the Library in general were pretty small, and when departments like English or History received between \$500 and \$1,000 annually for the purchase of books. The first item on the agenda was a letter from the Department of History, proposing the expenditure of \$500,000, spread over five years, for the purchase of books and periodicals in History. There was a stunned silence in the room. It was almost as if someone had committed blasphemy in the presence of a bishop. Had the Department of History lost all sense of proportion, all sense of reason?

Then suddenly, as we were all trying to formulate some sane response to so unthinkable a proposal, the clear voice of Art McCalla broke the silence.

"The request," he said, "is perfectly reasonable."

Everybody looked at him. He repeated that simple statement, then went on to say that it was true that we did not at the moment have the money to meet such a request, but that that did not make the request itself unreasonable, and that if we ever aspired to become a really important University, we would have to build a really distinguished library collection in the humanities and social sciences, and we would have to think in new terms and in a new way.

His remarks transformed the meeting. For if so clear-headed a man as Art McCalla thought that the request was reasonable, well, then, perhaps it was reasonable. We did not have to think of reasons why it should be dismissed out of hand. We could instead think of how it might be implemented. (In fact, during the sixties, the goal which had seemed so fantastic was achieved.)

For me, that incident has always been an example of what true leadership should be. Not the issuing of orders, not the cracking of the whip, not the imposition of one's own ideas, but rather the perception of possibilities that are hidden from others, the opening of doors, and the creation of a climate in which the creative capabilities of men and women can flourish. (Continued on page thirty-four)



FORREST HARD

Henry Kreisel, Vice-President (Academic), has been a close colleague of Dr. McCalla, (RIGHT) having served as Associate Dean of Graduate Studies from 1967 to 1969 and as Acting Dean in 1969-70.



CAMPUS REPORTER

Research of value to Alberta

This summary of research projects at the University and their value to the province was prepared by A. G. McCALLA, Dean of Graduate Studies, at the request of the President, MAX WYMAN.

Requests for statements regarding the value of research to Alberta have brought many replies from deans, department chairmen, and individual staff members. Common to all these replies are several basic principles which are set out as follows:

(1) It is impossible to make a clear separation of the values directly attributable to research at the University as distinct from those at least partially attributable to advanced education as represented by graduate work. Our graduate program could not have been developed without research, and our research programs could not have been carried out without graduate students.

(2) One of the most tangible values of research is the pool of highly educated and trained manpower resulting from our research projects that contribute so much to graduate education. For example, many senior executive positions in Alberta's petroleum industry are held by former graduate students from this University. These positions would be filled by foreign-trained engineers had we not developed our graduate and research programs.

(3) The quality of undergraduate education has been greatly improved because it has had the benefit of rapid utilization of ideas generated in graduate work and research. An active interest in research leads staff and graduate students to keep up with the latest developments in their fields. These people can then make their lectures and laboratories much more meaningful to their undergraduate students.

(4) The results of most research projects have much wider applicability than to the Province of Alberta but the province will profit from a large proportion of the research carried on.

(5) A large amount of money used in research projects comes from sources other than the province, especially from bodies such as the National Research Council, the Medical Research Council, and the Canada Council.

Results obtained from many of the projects have great value to Alberta, but most of these projects are not narrowly conceived.

ALBERTAN NEEDS

There are research projects which are first and foremost designed to serve Alberta needs. Some of these concern our natural resources and their potential development. A few examples follow:

(1) Research by departments such as Geology, Geography, and Geophysics in the Faculty of Science is directly related to resource discovery and development in Alberta. Members of the staffs of these departments have been, and are, involved in projects of direct benefit to Alberta.

(2) The Department of Soil Science has carried on research on Alberta soils, their most effective use and conservation, for nearly fifty years. The results of research projects have had great value in terms of use of gray wooded soils and podsollic soils, use of fertilizers, etc. In co-operation with the Department of Plant Science, farmers have been helped in developing rotations for improved and permanent use of the soil resources.

(3) The Departments of Chemical and Petroleum Engineering and Mining and Metallurgy have contributed greatly to development and exploitation of provincial resources. The letter from R. M. HARDY, Dean of Engineering, is really a condensed synopsis of this work and can hardly be effectively condensed further. There can be no doubt about the value to Alberta despite the fact that none of these developments can be solely attributed to one research project or individual.

RENEWABLE RESOURCES

There are other projects which are directly concerned with Alberta renewable resources.

(1) Much of the research in the Faculty of Agriculture is of this type and the support such research receives from the Alberta Agricultural Research Trust is recognition of its potential value to Alberta. The projects include a very wide range: control of insects, weeds, and diseases of crops; the development of new horticultural and field crop varieties; the elimination of harvest

damage to crops; disposal of animal wastes; studies in animal physiology with special reference to extreme winter conditions; beef cattle breeding; nutritional studies, etc. The work of the Department of Animal Science on the nutritive value of rapeseed meal has led to extensive use of this material in livestock and poultry rations. Rapeseed is now a major crop in Alberta.

(2) Ecological studies in botany and zoology are of great importance to Alberta and promise to be even more important. Research in ecology in its broadest terms will involve departments in biology, engineering, and in the social sciences.

Already Zoology staff members have carried out important studies on wildlife. This work has had a strong orientation towards the north. All of these studies recognize that wildlife constitutes one of the great national resources of the province.

EDUCATION

The Faculty of Education has established an excellent reputation for its graduate programs and research. Former graduate students are to be found on the staffs of universities all across Canada and in the service of many provincial and local Departments of Education. The record in Educational Administration has just been vividly reviewed by W. H. SWIFT, BA '24, MA '27, BEd '30, LLD '68, first Chairman of the Alberta Universities Commission. During the period 1958-70, seventy-three students in this department completed PhD programs and each program involved major research, many of the topics being pertinent to Alberta. During the period 1959-70, seventy-one students in the Department of Educational Psychology completed PhD programs and again many of the research projects were pertinent to this province.

Research carried out in the Departments of Elementary and Secondary Education usually involved classroom and student situations. This usually means that the Alberta situation is studied and the results, in the final analysis, will be beneficial to Alberta.

ENGINEERING

Research in the Faculty of Engineering covers many fields not referred to above. Much of this research is of direct value to Alberta. Only a few examples are given.

(1) Such research in the Department of Civil Engineering includes: work on design of dams and bridges; highway research; sanitary and environmental problems; hydraulics and river engineering; soil mechanics and foundation engineering, and structural engineering. This department has made research contributions of value to the province for nearly fifty years.

(2) Projects in Electrical Engineering were for many years oriented towards power generation and distribution. Now the department has expanded tremendously and is in the forefront of research in electronics and its many related demands. Research such as this has enormous potential for developments in Alberta.

(3) Much of the research in the comparatively new Department of Mechanical Engineering is directly related to Alberta conditions. Examples are: heat transfer studies with direct applications to pipeline systems; measurements of solar energy in relation to air-conditioning; work on fatigue life, crack initiation, detection and propagation in steel with direct application in petroleum processing plants; pipeline design.

MEDICINE

The Faculty of Medicine considers its research program essential to prepare future medical teachers, scientists, and clinical specialists for Alberta and for Canada. W. C. McKENZIE, Dean of the Faculty, states that we are still a "debtor" institution in regard to graduate training programs.

Fundamental or basic medical research in biochemistry, physiology, pharmacology, pathology and bacteriology provides the expanding knowledge and understanding of human biology and disease processes which are essential if new methods of prevention, diagnosis, treatment, and rehabilitation of human diseases are to be applied for the benefit of the people of this province. The direct benefit to health and

welfare of the people of Alberta from such programs as those presently being conducted in the chemotherapy of malignant disease, in immunology, in nephrology and renal transplantation, in neuromuscular histological techniques, and in many other areas is readily apparent.

In the last few years basic research carried out in the fields of shock, open heart surgery, renal dialysis, kidney transplantation, and many other areas, has been the basis of the establishment of diagnostic and treatment programs now in active operation throughout this province. The benefits in health and longevity to the people of the province is unquestioned.

In the immediate future, research now

under way in immunology, molecular biology, neurophysiology, mental retardation, and other areas will be similarly applied in the health services in the province. Research programs in the Faculty of Medicine relating to the systems of health care delivery and the provision of health services may have far reaching results in improving the efficiency and cost effectiveness of health care delivery in this province.

SOCIAL SCIENCES

Research in the social sciences and humanities is carried on by many departments. The demands made on members of many of these departments such as Sociology, Economics, Political Science, etc., to carry out research of immediate interest to

The World Amateur Wrestling Championships were held at the University last summer. Teams from thirty-six countries competed in Greco-Roman and free-style, with the Soviet Union taking top honors in both (Canada placed eleventh and seventeenth). Because the young athletes stayed in several University residences, Lister Hall looked like a branch of the United Nations every mealtime and the adjacent lawns were work-out areas for teams of rangy Swedes, stocky Mongolians, and formidable young men of all descriptions and sizes.



government departments and especially the Human Resources Research Council, indicates clearly that such research is considered to be of direct benefit to Alberta. It is impossible to summarize the scope of such research but it must be emphasized that it would be impossible to undertake most of it without the help of graduate students. An individual staff member does not, in general, do the detailed work involved in such research. Graduate students work under direction, develop their potential capabilities and, at the same time, produce useful results.

It has been stressed by the Dean of Arts, the Associate Dean, and some staff members that it is impossible to draw a line showing "valuable" results on one side and "of no practical value" on the other. In the long run, "research" in the fine arts may be just as "valuable" to Alberta as is research in petroleum engineering.

BUSINESS ADMINISTRATION

Research in Business Administration is a very recent development at this University. Nevertheless, many theses submitted since 1966 have dealt with Alberta problems, including aspects of the petroleum and gas industry; pulp and paper; tourist travel; local building industry; fertilizer industry; trade unions. Many other research projects and theses have value for the province although not based exclusively on Alberta.

It is not possible to review all the submissions from the smaller faculties and schools. Most of them can point to research of value, directly or indirectly, to Alberta. Most of these faculties and schools have started research and graduate work rather recently or are now in the planning process.

There is, however, complete agreement that research is an essential part of university work and that its value, in tangible and intangible ways, is beyond dispute.

Mary Spencer appointed to National Research Council

MARY SPENCER, Professor of Plant Science, is one of the first two women to be appointed to the National Research Council. Mrs. Spencer and THERESE GOUIN DECARIE, a research consultant in Psychology at St. Justine Hospital for Children in Montreal, took positions on the twenty-one member Council for three years beginning July, 1970.

Other members of the Council from The University of Alberta in recent years have included MAX WYMAN (President of the University), HARRY GUNNING (Chairman of the Department of Chemistry), A. G. McCALLA (Dean of Graduate Studies), and ROBERT NEWTON (President Emeritus). HENRY MARSHALL TORY, the University's first President, was the first President of the National Research Council.

The National Research Council is established for the purposes of undertaking, assisting, and promoting scientific and industrial research. The NRC sets policies for research in the National Science Laboratories in Ottawa and the regional laboratories in Saskatoon and Halifax. The laboratories in Ottawa are available to all of Canada for consultation on scientific problems, while the Prairie and Atlantic Regional Laboratories deal with problems peculiar to their specific areas. The NRC is also the main source of funds for research in Canadian universities. The funds for projects in the universities, laboratories, and industries come from three separate parliamentary votes. The Council is not responsible for the division of funds between these areas.

"A person is expected to bring to his position on the Council expertise in a specific field as well as an overall feel for science

in Canada," says Mrs. Spencer. She feels that the work for the NRC is valuable as "a place where one can bring a viewpoint, and approach the problems that one can see in education and the economy." Mrs. Spencer expresses particular concern about the state of science in Canada in 1971. "We cannot afford the luxury of wasted manpower; we are running out of time for solutions to the problems of this age. It is science that must meet these problems, and that requires persons trained to explore facts. There must be a way to educate young people to use their education. . . . The valuable and the not-so-valuable types of research must be sorted out, and more opportunities created for the utilization of scientific manpower."

One keen problem in Canada is that the majority of industries are too small to support research. The NRC aims to aid and develop industries to a point where they are sophisticated enough to compete in useful scientific research and in the employment of trained scientists.

Mrs. Spencer has deep roots in Alberta; her mother came as a child with her family to pioneer near Ohaton, Alberta, and her father, JOHN J. STAPLETON, taught high school in Wetaskiwin in the early days. Mary graduated in Honors Chemistry from the University of Saskatchewan, and earned graduate degrees from Bryn Mawr and the University of California at Berkeley. She has been at The University of Alberta since 1953.

As a plant biochemist, Mrs. Spencer studies the chemical reactions in living organisms, in particular the biochemistry of development and aging, in which the hormone ethylene plays a significant role. The effects of application of minute amounts of ethylene on plant and animal organisms are unknown as yet, and make exciting and vital research.

Retirements

Five long-time University staff members have been appointed Professors Emeriti. They are:

H. R. MacLEAN, Dean of Dentistry since 1958, a member of the faculty since 1935, and immediate past-President of the Canadian Dental Association;

J. H. WHYTE, Professor of Botany and Director of the University's Botanical Gardens since their establishment;

H. F. J. LOWIG, Professor of Mathematics and a member of the Department since 1957;

L. P. V. JOHNSON, BSc(Ag) '31, MSc '33, Professor of Genetics and author of *Aberhart of Alberta*, published last year; and

J. W. MacGREGOR, BA '26, MD '30, Professor of Pathology and Chairman of the Department for almost twenty years.

Dr. Johnson now is living on Vancouver Island. Dr. MacLean is continuing his private practice, Dr. Whyte his work in the Botanical Gardens, and Professors Lowig and MacGregor their teaching.



Student legal services

In the fall of 1970, Student Legal Services, chaired by LOIS GANDER, BA '70, a third-year law student, presented a brief to the Faculty of Law requesting permission to operate three legal-aid offices—one on Boyle Street, one at the Fort Saskatchewan gaol, and one on campus at The University of Alberta, to give assistance to Legal Aid, the Law Society's project. When permission was granted, Student Legal Services entered its second full year of existence.

The project which became Student Legal Services was started in the spring of 1969 by about ten students and two professors, B. M. BARKER, Associate Professor of Law (and now President of the Association of the Academic Staff of The University of Alberta), and P. FREEMAN, Assistant Professor of Law. They requested two student assistantships for the summer to work in the Boyle Street area of Edmonton with legal problems. Permission was given and the students set up office in the same building where medical students were providing their own medical aid service. That fall and winter three-member teams rotated every day to keep the offices open. In the summer of 1970, two more student assistantships were granted. Miss Gander and HAVE MADILL, BSc '68, started a new office six blocks south, on 96 Street and 103 Avenue, in the same building with the Native Brotherhood Society.

Student Legal Services helps persons of limited means who do not qualify for legal aid. Advice is given about procedures, and information is obtained about defence and prosecution to which persons without lawyers have no access. Sometimes it may be possible to negotiate on behalf of a client with whatever other party is involved, a landlord or employer for example. The students in some cases can open avenues

of approach which are unknown to the persons involved. The project at Fort Saskatchewan, begun in November, includes educational programs on arrests, rights, and court procedures. About thirty-five students work on the Services, and operations are supervised by volunteer practicing lawyers and articling students.

The objects of Student Legal Services are three-fold: to raise general knowledge of legal rights and positions, to provide service to members of the community who cannot ordinarily obtain legal advice, and to give law students an opportunity for "clinical" education.

Central Cinnamon Building

Life in a new building is usually interesting, and in the Central Academic Building is turning out to be particularly so. The building's location has provided it with instant familiarity to students and staff. Most denizens of the campus can count a handful of buildings here, some of them several years old, that they have never ventured near, but few people have not already been inside the Central Academic Building.

The building has its faults, perhaps. The heating system appears to defy human control, and there is an almost total absence of privacy from the noises of even quiet neighbors. But the building's floor space is organized to provide a great deal of flexibility on the office and classroom floors, and a feeling of informality and openness in the public areas.

The galleria, the great open space cut out of the centre of the lower four floors, and extending in two smaller light wells all the way to the roof, is the building's most interesting feature. Its dramatic effect is all the more surprising in a building of such spartan exterior and straightforward finish. The Central Academic Building is probably

the least lavish of the recent buildings here, and its touches of luxury, such as the carpeting and stylish furniture in the student lounge on the main floor, are all strictly related to utility.

The galleria, lounge space, and concourse on the main floor provide a full-scale demonstration of what this campus may be like in a few years: a system of interconnected buildings, linked to provide pedestrian routes that are protected from the Prairie weather, and that are interesting and pleasant as well. The apostles of this idea are A. J. DIAMOND, BARTON MYERS, and RICHARD WILKIN (of Toronto and Edmonton), the University's planning consultants. The principal architect for the Central Academic Building was H. J. RICHARDS (of Edmonton), who also designed the Students' Union Building.

Peering over the galleria's tiered balcony corridors has become something of a between-classes entertainment in the new building: the students never require too much excuse to line up and inspect one another, and here it can be done on four levels and in panavision.

The galleria has been surpassed as the Central Academic Building's most popular feature, however. The cafeteria, heir to the site of the old Hot Caf, is also heir to one of the most notable items of provender at the former Tuck Shop.

The rather romanticized longing which many people express for the Tuck Shop is due largely to its cinnamon buns.

"They are not really cinnamon rolls, but a bun made from a Scandinavian soft dough, with a lot of egg, dipped in shortening, rolled in cinnamon and sugar, tied in a knot, and baked," said MRS. JOYCE KERR, Manager of the new cafeteria, adding, "it's really very simple."

Mrs. Kerr was Manager of the Tuck Shop lunch counter during its last year of operation, after the building was bought by the



University. She has been at the University for 22 years, first in the Cafeteria in the old Education Building (now E. A. Corbett Hall), later Athabasca Hall and the test kitchens in Lister Hall and the Students' Union Building.

For those who cannot visit the Central Academic Building cafeteria every day, she has provided the following recipe.

TUCK SHOP CINNAMON BUNS

Soften 2 packages instant yeast
in ½ cup warm water
add 1 tablespoon sugar
In a mixing bowl place 2 cups boiling water
add 2 tablespoons margarine
1 teaspoon salt
2 tablespoons sugar
Let the margarine melt, then add
2 eggs
Let this mixture cool a bit, then add the
softened yeast and
4½ cups all purpose flour
Beat this mixture hard for 5 to 8 minutes to
form a smooth dough. Cover and let stand
in a warm place to rise, until the
dough is about double in bulk, about 1 hour.
To make the buns—In a flat bowl, melt
1 cup margarine
Set aside to cool
In another flat bowl, mix
1 cup white sugar
2 teaspoons cinnamon
Turn the raised dough onto a lightly floured
table. Cut into pieces about the size of
an orange. Dip each piece first into the
melted margarine, then coat it well with the
cinnamon and sugar mixture.
Stretch the dough piece, and form into a
simple knot. Place knots side by side in a
baking pan with sides about 2 inches deep.
Allow a 2½-inch square for each bun.
Let the finished buns rise for 45 minutes.
Bake at 375 to 400 degrees for 30 to 40
minutes. This recipe will make 18
good-sized buns.
N.B.—The dough will be very sticky, but
do not add more flour, as this will spoil
the texture of the buns.

Collège Universitaire Saint-Jean

The red brick building stands in peaceful authority on one of Edmonton's highest hills. From it, one can look across the valley of the North Saskatchewan to a spread of green tree tops. And in the bright glare of the sun, the protruding concrete towers of the city disappear. There remains only the clear vista that appeared to the first fathers of Collège Saint-Jean.

Father Henri Grandin, Vicar of the Missions of Alberta-Saskatchewan, had a dream of building a permanent home for the juniorate for future Oblate priests. In 1908 he had seen the beginnings of an ecclesiastical school in a slatted wooden house in Pincher Creek. One priest, Père Daridon, and two pupils had studied and worshipped together there. But growth did not seem possible in such an isolated place,

so the school was moved to Edmonton. For one year the scholars were housed on 111 Street, and then Father Grandin's wish came true.

In 1910 the site of Collège Saint-Jean was chosen, a grassy field on Strathcona Hill. The view from the doorway of the first building probably inspired the College's crest, the huge globe of the sun rising, with the motto "Levate Oculos," lift up your eyes.

The founders hoped to establish a college for the French Catholics in western Canada. In the program of studies, the aim of Collège was given as the formation of "une élite bilingue et cultivée, à tous les niveaux de la société." In its new home, starting with twenty-nine juniorists, four fathers and two brothers, Collège became the hardy French-language institution that has retained its identity for over sixty years. Though tiny, its student population only 400, Collège is exactly as old as its large English-speaking neighbor, The University of Alberta. When the first building rose for Saint-Jean, only Alberta College South (now St. Stephen's) existed on the site designated as the campus of the new University. Not until one year later, in 1911, was Athabasca Hall finished.

At Collège, religious and academic studies were given in the classical tradition, with subjects such as rhetoric, philosophy, Latin, Greek, art, and English. By 1917 there were fifty students, and expansion was necessary. War time economy produced "la maison blanche," a temporary classroom structure. Forty years later, in 1958, "la maison" finally retired from use; it burned to the ground. In 1921, however, three additions were made to the original main building, tripling its capacity.

The survival and growth of Collège reflects the personal efforts of the clerics who inhabited it over the years. The statue

of Saint Jean which stands over the doorway of the main building was donated by Father Delouche in 1921. The chapel in this building, walled with ornate hand-carved wooden statues made by the Oblate brothers themselves, and the grotto, a rounded stone hut in which worship was held, are distinctly French-Canadian. In yearbooks from the 1940's there are pictures of the clerics hauling cartloads of stones for construction. It is not unusual to see a priest tending the flowers which dot the lawns.

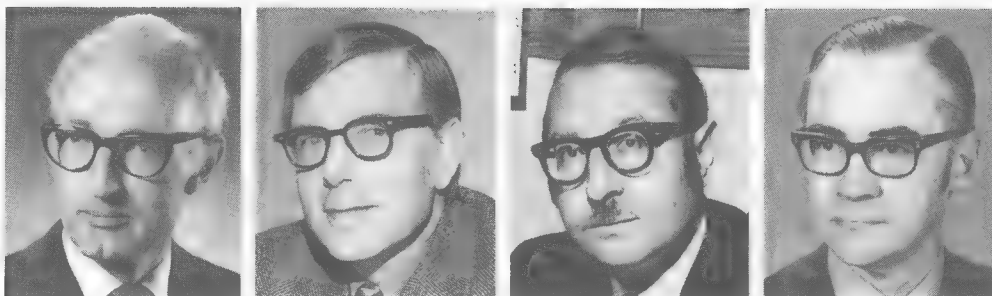
Monuments to the history of the school abound. The grandfather clock which dominates the foyer of the old building has been sounding the hours for classes and meals as long as Collège has existed. "Le bon frère Antoine," a favorite memory of many, stood by this clock as the students came and went. He was inspirational by his pious life, and since his death he has been beatified. His belongings are preserved in a little room together with literature written on his life.

Illustrious alumni, "les anciens" as they say, keep the memories beyond the grounds of Collège. LOUIS DESROCHERS, *LLB '52*, the new Chancellor at The University of Alberta; ROBERT GOULET, entertainer; BERNARD TURGEON, opera singer and Assistant Professor of Music at the University; MAURICE LEGRIS, Assistant Professor of English; and JOHNNY GOTTSLIEG, formerly of the Chicago Black Hawks, are a few. The well-known Collège Chorale has given the French students a voice across Canada, and any local hockey-leaguer can testify to the strength of Saint-Jean's hockey team. New buildings are the outward signs of changes in time at Collège. The secondary school, built in two sections in 1958 and 1961, the gymnasium, lounge, cafeteria, and auditorium



Collège Saint-Jean's main building, completed in east Strathcona in 1910.

Dr. Allen
Dr. McGregor
Professor Fridman
Dr. Baldwin



add a dimension to Collège. Once entirely residential, now only about one-eighth of the students live in. Although it began as an English-speaking school, in 1926 a decision of Rome allowed that instruction be given in French. The school became non-denominational in 1943. In 1955, Collège affiliated with the University of Ottawa, having followed its courses for several decades. The university courses were then recognized by the Department of Education of this province. Instruction is now bilingual, and courses are similar to those at The University of Alberta. Women were admitted to Collège for the first time in 1961, and only at university level, but now are more numerous than men. Clerics are outnumbered by lay persons on staff at Collège. Until the recently completed integration with the University, students could take classes from secondary school to second year university and then were to transfer to another campus for their final years of degrees programs.

Integration with The University of Alberta, approved by the General Faculties Council and by the Board of Governors in November, will benefit Collège in many ways. Financing, academic course accreditation, admission, employment of staff, and examinations will be provided by the University. As a bilingual and bicultural section of the University, Collège will accommodate students from the main campus, and similarly Collège students will take what courses they require on the main campus. This exchange will help to acquaint English-speaking students with the French language in its spoken context, as well as give Collège students opportunities for broader programs. Collège Universitaire Saint-Jean will be an integral part of the University, not an affiliated college. The Dean of Collège will have the same status as other deans, and will be appointed jointly by the Administrative Council of the College and the University. The University will be responsible for all educational programs leading to university degrees, diplomas, and certificates. The Administrative Council of Collège will maintain the French-Canadian character and the ownership of its premises and facilities, which the University will lease. Staff at Collège Saint-Jean, hitherto receiving stipends from the profits of the institution, will be salaried. There may be more voices in the hallway, more clatter in the cafeterias, but in fact, Collège will remain the same. Its character, nourished by such traditions as the annual sugaring-off and the Chorale of young French voices, will thrive with integration.

Appointments

WILLARD F. ALLEN, Associate Professor of Chemistry, has been appointed Associate Vice-President (Academic) by the Board of Governors. He will aid and be responsible to HENRY KREISEL, Vice-President (Academic).

Dr. Allen, a native of London, Ontario, has degrees from the University of Western Ontario and the University of Toronto. He joined The University of Alberta staff in 1948 in Calgary, where he taught chemistry until coming to Edmonton in 1957. He has been President of the Association of the Academic Staff of The University of Alberta and of the Canadian Association of University Teachers.

JOHN R. MCGREGOR, BSc '50, BEd '52, MEd '55, Professor and Chairman of Mathematics, has been appointed Dean of Graduate Studies effective July 1, 1971. He will succeed A. G. MCCALLA, BSc (Ag) '29, MSc '31, who retires this summer.

Dr. McGregor joined the Department of Mathematics in 1959 and became Chairman in 1966. He was born and educated in Edmonton and attended The University of Alberta between 1950 and 1955. He obtained his doctorate in mathematical statistics from Cambridge University.

Since he joined the University staff, Dr. McGregor has published several pieces of research, has served on some thirty committees at all levels, and has earned a considerable reputation as a teacher.

GERALD H. L. FRIDMAN, Professor of Law, was appointed Dean of Law, July 1, 1970. He succeeds GERALD V. LaFOREST, who resigned to become senior adviser on constitutional law to the Prime Minister.

Professor Fridman studied law at St. John's College, Oxford, and the University of Adelaide, South Australia.

From 1953 to 1956 Professor Fridman lectured in law at the University of Adelaide. In 1956-57 he lectured at University College, London. The following year he joined the Faculty of Law at the University of Sheffield, where he remained until his appointment to the Faculty of Law here last year.

R. G. BALDWIN, Chairman of the Department of English, has been appointed Associate Dean (Planning and Development) of the Faculty of Arts. He will be

responsible for the calculation of the space and staffing needs for the faculty in the light of present academic programs, and for academic development plans.

Dr. Baldwin was born in Vancouver, British Columbia, in 1927, obtained a Bachelor of Arts degree from the University of British Columbia and master's and doctor's degrees from the University of Toronto. He joined the Department of English in 1951 and became Chairman in 1967.

One-sixth of a telescope

The University of Alberta owns part of a telescope. As a member of Westar, a consortium of six Canadian universities, it has inherited a share of a 17.5 ton quartz disc, 157 inches in diameter and two feet thick, a specially designed machine to grind the blank to its required contour to a precision of one millionth of an inch, and an aluminum test mirror 100 inches in diameter. These assets, along with a winding road in British Columbia leading to a mountain peak site, were given to Westar by the federal government.

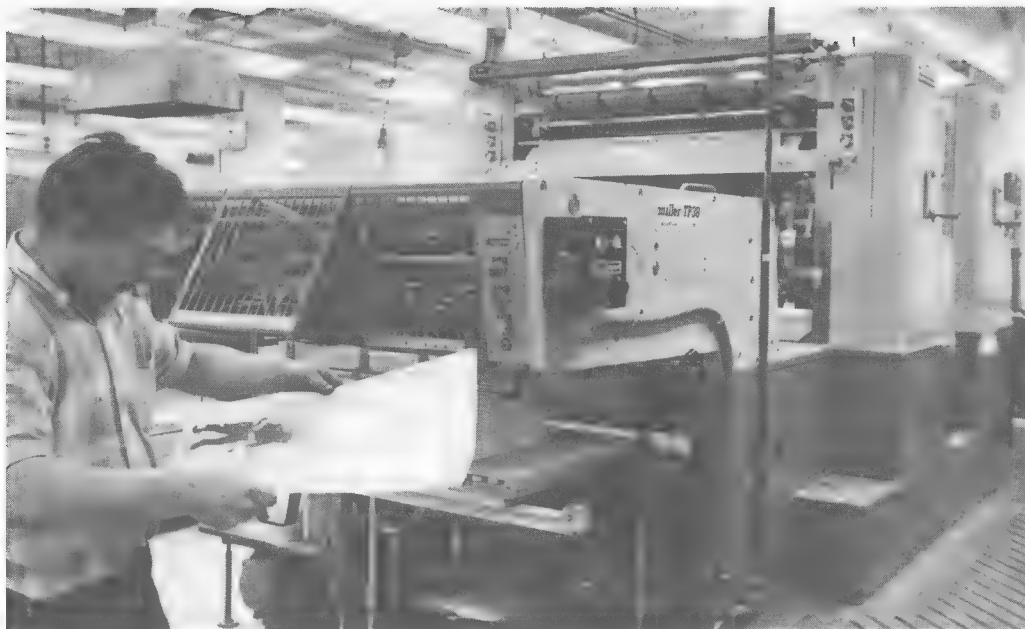
The six universities involved in the consortium are Lethbridge, Calgary, Alberta, Victoria, British Columbia, and Queen's. Laval University and York University are expected to join the group in the near future.

The project, previously the Queen Elizabeth II telescope project, was laid aside by the federal government two years ago as an austerity measure. Assets worth one million dollars were turned over to the consortium by Energy and Resources Minister J. J. GREENE.

The site chosen for the new telescope on Mount Kobau, a 6,200 foot peak near Osoyoos, British Columbia, is ideal for an observatory because of its height and the clearness of the air in the unsettled area. A road costing \$2 million has been built up the mountain, where a minimum observatory is operating now. This road is the highest high-gear road in British Columbia.

J. A. JACOBS, Killam Memorial Professor, and J. SAMPLE, Professor and Chairman of Physics, represent The University of Alberta on the Board of Directors of Westar.

Westar will operate the only sizable telescope west of Toronto. It will be used by the members of Westar in co-operation with the astronomers at the Dominion Astrophysical Observatory in Victoria, a section of the Astrophysical Branch of the National Research Council.



The University's Printing Department recently purchased its first perfecting press, a Miller TP38. A "perfector" can print both sides of a sheet in one pass through the press (or it can print two colors on one side in one pass). This machine is big enough to handle a complete eight-page issue of The Gateway at once, four pages on each side of the sheet. It is also used for the University Calendars, NEW TRAIL (16 pages at once), and several other University publications. Running speed is 7,000 impressions per hour.

The first forestry program on the prairies

Almost a quarter of Canada's productive forest land is in the prairie provinces, yet until last fall there was no university level program in forestry between Ontario and British Columbia.

Last September the Faculty of Agriculture began the first year of instruction of its new four-year Forest Resource Management Program. It will lead to a Bachelor of Science degree in one of three optional sequences, Forest Management, Forest Hydrology, or Forest Range Management. A fourth course sequence on the control of pollutants is planned for the near future.

The program has been developed with reference to Canada's four other faculties of forestry, the forestry schools in the United States, and the federal and provincial forestry services. Courses will include many subjects common to other programs in Agriculture, such as soil science, plant science, entomology, plant pathology, and agronomy, plus new subjects that will form the specialized part of the program: forest mensuration, wood anatomy, harvesting, silviculture, and forest ecology.

The new program has been designed to meet the needs of the profession, and graduates will be qualified as professional foresters.

Forest Resource Management represents a first step by the Faculty of Agriculture to broaden its scope beyond the traditional agricultural studies to the whole range of renewable resources.

Richard Eaton Singers tour England

Over a year ago, SANDRA MUNN, Assistant Professor of Music, began writing letters to British cities where musical festivals were to be held. Miss Munn wanted to take her chorus, The Richard Eaton Singers, on tour in Britain. Now, after a great deal of letter-writing, rehearsing, fund-raising, and costume-making, she is back to say "We made it."

The Richard Eaton Singers, formerly called the University Singers, are a "community" choral group started in 1951 by the late R. S. EATON, then Head of the Department of Music.

For the tour Miss Munn narrowed the choice of sixteen possible festivals to six, spaced over a four-month period. "We wanted to sing in concerts; we are not really a competition choir," she says. Maybe not, but in their two adjudicated performances, the group won a first prize trophy and a fourth prize. The soloists RUTH NEW and NIGEL LEMON both placed first in their classes at Bournemouth.

The choir of thirty-five left Edmonton by chartered plane on Sunday, July 5: students, University staff, and Edmontonians of various occupations. Their first concert in England was July 8, when they sang in Coventry Cathedral.

From there the chorus travelled by chartered bus to Bournemouth. Miss Munn remembers the bus driver fondly. "I carried with me everywhere a red umbrella. It was our mascot, our good luck token. One day in Bournemouth it was left behind in

the confusion and the bus driver offered to go back, clear across town, to pick it up for me. He did, and that was the day we won first prize, too."

As they were passing through Salisbury, on the way to London, they stopped to look at the cathedral. "We were in costume, and a well-dressed gentleman approached me. He asked if we were a chorus and if we wanted to sing in the cathedral. I said sure, and we did. I thought perhaps he was a vicar, but we discovered later that he was a visitor too—the janitor's brother," Miss Munn chuckles.

In the ten free days before the next concert, many of the chorus members managed to make whirlwind tours of the countryside, visiting relatives as far away as Holland and Germany, and even hitchhiking to Scotland.

All together once again and packed into their bus, the Singers set off for Battle, where they performed at the Tenth Annual Battle Festival. When encores were requested, Miss Munn and her Singers led the audience in a sing-song "If I had a hammer" and an unrehearsed rendition of "Allouette."

Then the Singers proceeded to St. Martin's in the Fields on Trafalgar Square, where they performed in a noon hour concert to a full house. From London the group moved to King's Lynn, the historic home of Captain Vancouver, where they sang in the Old Guild Hall, built in 1410.

The last concert on their itinerary was the Tees-side Festival held in Middlesbrough, Yorkshire. This huge international festival involved 5,000 competitors, about half of whom were from overseas. The evening before the festival was to begin, the huge tent which was to have held all the choirs and the audiences burned in a flash fire. Within the next twenty-four hours, organizers had arranged the concerts in halls and churches, and the entire event went ahead on schedule. This was the festival at which they won fourth prize.

Wherever the Singers appeared they were enthusiastically received. Their program had a Canadian spirit, an appealing originality. They rehearsed in old town halls, on lawns, in hotels, pubs, the tube; they performed in churches, theatres, and on the village green, and they still hadn't had enough—so they sang in the plane coming home.

"Just before we left," said Miss Munn, "I thought if we make it through this tour, Good Lord, I'll never ask for another. But now I think it could be done again. . . ."

Education between cultures

The Cree Indians, inhabitants of the northern parts of Alberta, have no word for "thank you."

"The Indian has no need for such a phrase," says JOHN CHALMERS, MA '34, MEd '41, Associate Professor in Educational Foundations and member of the Intercultural Committee of the Faculty of Education. "He believes

he has a *right* to things. If a man has a surplus, and another man a lack, then it is understood that man has the simple right to claim what he needs. The Indian needs and has a right to teachers."

The developing intercultural program will begin to fill this need. "The basic function of the program," says Dr. Chalmers, "is to prepare teachers for intercultural situations."

In Alberta, a classroom is "intercultural" when its students are Indian, Métis, Eskimo, and white. The teacher in such a classroom must possess a special sensitivity to value systems other than his own.

"It is a truism in education that all teachers are from the middle class," Chalmers admits. All the prejudices and the biases of the middle class are therefore present in the educational system. Students in the intercultural program are introduced to values and standards other than their own, and are schooled to recognize and accept different cultural patterns.

The program is very loosely constructed, with students selecting their own courses, possibly sociology, anthropology, or psychology. Linguistics and the teaching of English as a second language are also important, since many Indian and native children encounter English for the first time in schools. Although many native children speak Cree, Chipewyan, and other tongues at home, lessons are conducted entirely in English. According to Dr. Chalmers, the French language is rarely spoken among Métis now, and for this reason is not used in schools.

A compulsory part of the intercultural program is the summer "practicum." The students spend their summers for two years in succession in native communities in Alberta teaching, counselling, and generally applying themselves as needed.

This valuable experience can be terrifying and frustrating to the students, who may find themselves the sole white person within a hundred mile radius. The student teachers are visited once during the summer by a program director; other than this, they are entirely on their own. Any progress they see in students or in situations is very slow. The advances made will very often reverse themselves later on.

When the brightest girl suddenly drops school at fifteen to have a child, the teacher must realize that progress has been made nonetheless. "After all, this girl probably attended school for eight years longer than her mother did. This is progress."

The students learn about themselves as well as about the problems of Canadian natives. "They begin to realize that what they thought was an Indian problem really arises out of a white person's attitude." Graduates of the program receive a Dean's letter with a notation on their transcript that they have completed the summer practicums. Most will teach in the areas of Alberta where good teachers for natives are desperately needed, but some will go to

Africa or Latin America with agencies such as CUSO.

The Committee for Intercultural Education, chaired by LESLIE GUE, *BEd '47, PhD '67*, Associate Professor of Educational Administration, consists of representatives of all departments of the Faculty of Education, the Department of Extension, the Human Resources Development Authority, the native community, the Department of Indian Affairs, the Métis Association, and students.

"The purpose of the intercultural program," Dr. Chalmers states, "is to help the 'other' cultures—Indian, Métis, Eskimo, whatever—adjust to our society." It is difficult to say whether adjustment to white man's society, his standards, his language, and his traditions will help the natives exist as people.

With a group of fifty dedicated staff and students as a start, the program will expand, providing concerned and qualified teachers for Alberta's cultural melange. To Cree, Chipewyan, Blackfoot, Eskimo, and Métis communities the teachers will go—expecting no Indian to say "thank you."

DEATHS

MARGARET ETHYL JUDGE, *BA '15*, the wife of a former provincial Deputy Minister of Municipal Affairs, the late J. W. Judge.

WALTER M. CROCKETT, *Q.C., LLB '17*, Edmonton barrister.

HARRY AINLAY, *BA '25*, former Edmonton mayor.

JAMES CALDER, *MD '30*, former Clinical Professor in Paediatrics and specialist in child diseases.

JOHN CAMPBELL SPROULE, *BSc '30*, consulting geologist and engineer, and an expert on Canada's North.

NORMAN A. WATT, *BSc '32*, active in education in Medicine Hat since 1930.

W. S. MURRAY, *DDS '36*, recently retired as Senior Dental Officer with the Department of Veterans' Affairs.

HOWARD PICKUP, *BSc (Pharm) '40*, mayor of Drayton Valley, and named Alberta's Pharmacist of the Year in 1968.

VIOLET A. I. LARSEN, *MD '40*, former general practitioner and specialist in anaesthesia.

HORACE McCALL, *BA '41, BEd '46*, a member of the teaching staff in Fort Macleod, Alberta.

JOHN WILLIAM BUCHANAN, *BComm '49, LLB '52*, Edmonton barrister.

JAMES A. BURGESS, *BA '64, LLB '67*, of Camrose, who though paralysed from the neck down was admitted to the Alberta bar in 1968.

John Benjamin Taylor 1917-1970

By Allison Forbes

J. B. Taylor, Associate Professor of Art, died at his home on September 14. He was born in Charlottetown, Prince Edward Island, and educated at the Art Students' League in New York and the Ontario College of Art in Toronto. In World War II, he served four years with the RCAF, during which time his paintings of allied aircraft were exhibited across Canada and the eastern United States.

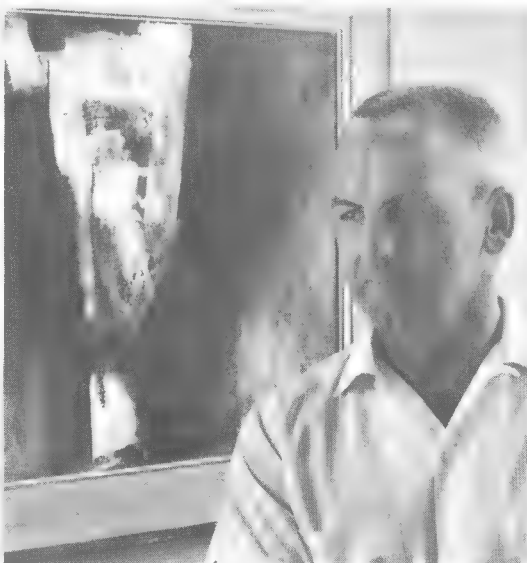
He joined the staff of the Department of Fine Arts in 1947 and soon rose to prominence as an artist. His work was displayed in dozens of one-man shows, the most personally satisfying of which must have been at his home town for the Prince Edward Island Centennial.

In the Department of Art he was known as an outstanding teacher. His own distinctive style notwithstanding, he encouraged students to develop in their own ways and he retained an interest in their development long after they had left his classes. He was interested especially in teaching community art classes and workshops and in taking art instruction to mental hospitals and correctional institutions.

In his own work it was as a landscape painter that he made his reputation. His art evolved gradually from a dramatic naturalism to a more abstract style which still retained elements of landscape. His work with images based on rock faces, ice fields, and glaciers was unique in art. His portraiture played a secondary role, but it did reveal his mastery of technique and his understanding of people.

Allison Forbes, *BEd '48, MEd '61, Associate Professor of Art*, was friend and colleague of Professor Taylor for more than twenty years.

Mr. Taylor



ALUMNI NOTES

By Alex G. Markle
Alumni Affairs Editor

'18

Fifty years ago JAMES HARWOOD OGILVIE, BA '18, LLB '22, was a rookie lawyer, taking his first tentative steps into the legal world of trials and error. At 77, he is still head of one of Edmonton's largest law firms, and a great deal wiser from the thousands of cases it has been his lot to handle.

'20

One of the University's golden graduates and a veteran traveller, RALPH FORSTER, BA '20, is already planning his next trip, to begin in January, hiking around New Guinea and Balai in Indonesia, "looking for old ruins and sightseeing in the mountains."

'25

Every "E" in ESTER E. PREVEY, BSc (HEc) '25, MEd '34, could stand for education. Dr. Prevey, the Director of Home Economics and Family Life Education for Kansas City public schools, has just ended 31 years of public service there.

A resident of Tucson, Arizona, G. ALLEN MAIL, BSc (Ag) '25, speaks glowingly of a recent trip made to Australia and the Far East.

'26

MATTHEW MATAS, MD '26, has been named a life member of the Canadian Tuberculosis and Respiratory Disease Association. Dr. Matas is now attached to the Northern Medical Services' Chronic Disease Control Division, which is responsible for interpreting all chest x-rays from the Northwest Territories.

'27

A founding member of the Blue Cross, the Canadian Diabetic Association, and the Canadian Arthritis and Rheumatism Society,

PERCY H. SPRAGUE, MD '27, has been awarded senior membership in the Canadian Medical Association.

'30

EDWEENA (McAFFARY) MAIR, BSc (HEc) '30, First Vice-President of the Professional Public Service Institute of Ottawa, has just concluded a three year term as chairman of the Institute's membership and recruitment committee.

A copy of the first printing of L. M. Montgomery's *Anne of Green Gables* has been presented to the Confederation Centre Library in Summerside, Prince Edward Island, by HUGH WHITNEY MORRISON, BA '30.

HAROLD C. MOSS, BSc (Ag) '30, of Saskatoon, one of Canada's leading soil scientists, was given an honorary Doctor of Laws degree this spring at the University of Saskatchewan's fifty-ninth Convocation.

'31

C. H. SKITCH, MD '31, was in Montreal recently to attend the first "C. H. Skitch Behavioural Science Lecture," sponsored by the Douglas Hospital in recognition of his years of service to the institution and the community.

'32

WALTER H. SPRAGUE, BSc (Pharm) '32, has been awarded the A. H. Robins Bowl of Hugaia, which is presented annually to the pharmacist who has contributed significantly to the community.

'33

A. D. BESSEMER, Q.C., BA '33, LLB '35, has been appointed to the office of Master in Chambers for the Supreme Court in Southern Alberta.

'37

ANNE (EVANS) CROFTON, BSc (HEc) '37, seems to teach joy. Mrs. Crofton,

an Edmonton native, teaches child care to Grade 12 girls in Victoria . . . things like bathing babies, what books to read to children at different ages, and how to discipline children without stifling their creativity. She teaches the girls how to be mothers in the way she hopes they'll teach their children how to be people.

'38

"Treadmill—or Treatment: new thinking about corrections" was the topic of discussion in Cornwall, Ontario recently, when ERNEST COTE, LLB '38, Deputy Solicitor-General, gave a lecture in connection with the course "Introduction to Criminology" presented by the University of Ottawa.

'39

FRED BENTLEY, BSc (Ag) '39, MSc '42, former Dean of Agriculture at the University, has been named a Fellow of the Agricultural Institute of Canada.

GEORGE R. STRETTON, BSc (Ag) '39, is now Saskatchewan District Supervisor for the Plant Products Division of the Canada Department of Agriculture.

'40

J. DOUGLAS WALLACE, MD '40, has been appointed General Secretary of the Canadian Medical Association. In Calgary last fall, Dr. Wallace was awarded The University of Alberta Medical Alumni Outstanding Achievement Award for 1969.

A. B. GARRETT, BA '40, has been named an Executive Assistant at the Canadian Press head office in Toronto.

J. R. MURRAY, BSc (Pharm) '40, MSc '50, is now Dean of the Faculty of Pharmacy at the University of Manitoba.

It was announced in England recently that JOHN J. PORTER, MD '40, a Calgary specialist in radiological medicine, has been elected a Fellow of the Royal Society.

One of the members of the Committee on the Healing Arts in Ontario is M. C. URQUHART, BA '40, Chairman of the Economics Department at Queen's University.

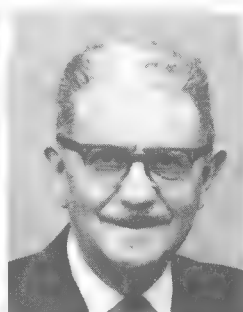
'41

RICHMOND F. L. HANNA, BA '41, Liberal MP for Edmonton-Strathcona from 1953 to 1957 is now a member of the Canada Pension Commission.

'42

O. G. BRATVOLD, BSc (Ag) '42, is the new Director of the Plant Industry Branch of the Alberta Department of Agriculture.

Mrs. Mair
Dr. Moss
Dr. Wallace
Dr. Murray



'43

CARSON H. TEMPLETON, *BSc (Eng)* '43, has been elected Vice-Chairman of the University of Manitoba Board of Governors. Mr. Templeton is the immediate Past President of the Association of Consulting Engineers of Canada.

The first H. R. MacMillan Laureate in Agriculture was presented at the University of Guelph to J. MILTON BELL, *BSc (Ag)* '43, of Saskatoon. Dr. Bell was honored for his research on the chemistry of rapeseed products and animal nutrition.

DORIS (THOMPSON) JEWELL, *BCom* '43, was named Red Deer's Citizen of the Year recently by the Chamber of Commerce. Her award cited her for "outstanding service to the community."

'44

W. WALLACE GRANT, *MD* '44, Director of the Child Development Clinic of Winnipeg Children's Hospital, and Professor of Pediatrics at the University of Manitoba, received the Manitoba alumni association's 1970 Jubilee Award "for distinguished achievement."

'45

The wife of a Toronto lawyer and mother of three small sons, DORIS (McCUBBIN) ANDERSON, *BA* '45, is the Editor of *Chatelaine* magazine and yet finds time to fulfil public speaking engagements all over Eastern Canada.

A rare honor for a rare breed of scientist has come to DON J. CAMPBELL, *BSc* '45, recipient of the Canadian Society of Clinical Chemists' 1970 Ames Award. The award is for his research work on inherited defects and for his contribution to the development of clinical chemistry in Canada. Dr. Campbell, who is on the staff of The University of Alberta Hospital, is noted for his work on "TKU"—phenylketonuria—a mental defect that responds to diet treatment if diagnosed in time.

There's a new job and a promotion for Colonel GARTH C. EVANS, *DDS* '45, commanding officer of the 11 Dental Company, Canadian Forces Base, Edmonton. In July he became a Brigadier-General and Director-General of Dental Services for the Canadian Armed Forces.

'48

FRANK BELYEA, *BSc (Ag)* '48, is Deputy Minister (Programs) for the Department of Development, Prince Edward Island.

GERALDINE FARMER, *BEd* '48, was chosen by the Business Education Council of the Alberta Teachers' Association as the

first recipient of the Charles DeTro Award for her contribution to business education in the province.

'49

There is a good deal of excitement at Wabowden, Manitoba, where the Manibridge steel mine site is continuing its amazing growth. The mine manager is W. A. CASE, *BSc (Eng)* '49.

North Canadian Oils Limited has announced the appointment of W. K. (KEITH) MILLER, *BSc (Eng)* '49, as manager for gas transmission.

Oilweek's prescription for oilmen suffering from anxiety occasioned by the Nixon proclamation on oil imports is a chat with ARNE R. NIELSEN, *BSc* '49, *MSc* '50, President and General Manager of Mobil Oil Canada Ltd., and newly-elected chairman of the Canadian Petroleum Association.

ANNIE (CHAPMAN) ROBERTS, *DipEd* '49, *BEd* '52, retired at the end of last term after 47 years of teaching.

Four years of research and editing have brought honor to G. J. ZYTARUK, *BEd* '49, *BA* '53, *MA* '59, Principal of Nipissing College at North Bay, for his major work on D. H. Lawrence, *The Quest for Rananim*. It has been selected for inclusion in the Scholar's Library of the Modern Language Association Book Club.

'50

One of three senior positions in the Alberta Department of Agriculture has been filled by C. J. McANDREW, *BSc (Ag)* '50, who moved from the Program Development Division to the directorship of the Extension and Colleges Division.

Among individual Albertans who have contributed to the integrity of this province's electrical industry is WALTER A. LAWRENCE, *BSc (Eng)* '50, President of the Electrical Contractors Association of Alberta.

R. B. MILLER, *BSc (Ag)* '50, has been appointed Assistant Professor at the University of Guelph's Ontario Veterinary College.

'51

Moving from Edson to Edmonton, A. P. CATONIO, *LLB* '51, has taken up duties as Judge of the Juvenile and Family Court.

Reflecting the rapidly growing importance of the mining industry and resource development to the Canadian economy, The Royal Bank of Canada recently announced the appointment of G. L. COLBOURNE, *BSc (Eng)* '51, *MSc* '58, as manager of its

mining department, with headquarters in Toronto.

The Right Reverend DILLWYN T. EVANS, *BA* '51, minister of Thornhill Presbyterian Church in suburban Toronto, is the new Moderator of the Ninety-sixth General Assembly of the Presbyterian Church of Canada.

'52

A move to Zurich, Switzerland, is in the offing for DAVID E. AITKEN, *BSc (Eng)* '52, who has been appointed Director of Conversion Plants, International Paper Co.

The Ontario Institute for Studies in Education has appointed ROBERT C. HARRIS, *BEd* '52, as head of the Northwestern Ontario regional development centre which opened in July.

'54

Royal Alex Place, a ten storey commercial-professional-apartment structure in Edmonton was opened recently. It is a joint venture of Belvedere Development Ltd., and International Building Corporation Ltd., of which PETER OLUK, *BSc (Eng)* '54, is President and General Manager.

Osoyoos, British Columbia has now four resident doctors, the latest addition being GORDON COULSON, *BSc* '54.

'56

How you feel about retirement depends on your state of mind, according to EDYTHE (LOVE) ALLAN, *BEd* '56. The first teacher in the Edmonton Public School Board's homebound program, Mrs. Allan says some people are unhappy about being retired, "but I don't think I will be."

JOHN M. HILLERUD, *BSc* '56, *BEd* '60, a graduate teaching assistant at the University of Nebraska, has been named Assistant Professor of Geology at Midland College, Fremont, Nebraska.

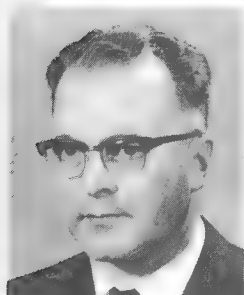
JEANNE S. MARTIN, *BSc (Nurs)* '56, has joined the teaching staff of the Nursing Education Department at Mount Royal Junior College in Calgary.

DON ROBERTSON, *BSc (Ag)* '56, spoke at the Alberta government's Direction '70 Outlook Conference last summer. Don, who is farming with his father near Carstairs, suggested that temporary restraint or an adjustment of production won't solve today's agricultural problems. The world trade situation has changed, he said, and farmers must make a fundamental change in the products they produce.

When the Expo '70 Concert Band students from Penticton, British Columbia travelled to Tokyo last summer, they spent a night in Kofu billeted with Japanese students, thanks to DAPHNE ROGERS, *BEd* '56. Miss Rogers has been teaching English there for the past ten years.

'57

The appointment of J. E. BOWER, *BA* '57, as Editor of *The Red Deer Advocate*, was announced last spring. Mr. Bower succeeds



Dr. Bell
Mrs. Jewell
Mr. Evans

F. P. GALBRAITH, *LLD* '59, the late Chancellor.

F. G. O. LANGSTROTH, *BSc* '57, is one of three new members of the management committee of the Atlantic Industrial Research Institute of the Nova Scotia Technical College.

DENNIS R. McCALLA, *BSc* '57, Dean of Science at McMaster University, was judge-in-chief of last spring's Cross-Canada Science Fair.

'59

ARTHUR KRATZMANN, *MEd* '59, Assistant to the Dean of Education at the University of Victoria, has been appointed Dean of the College of Education at the University of Saskatchewan, Regina Campus.

LEIF ERICKSON, *BCom* '59, a chartered accountant in Calgary, has been named alumni representative to the Board of Governors of The University of Calgary.

DOUGLAS G. PENNELL, *BSc (Eng)* '59, *MSc* '62, *PhD* '69, has been awarded a \$15,000 engineering research grant by the National Science Foundation. Dr. Pennell has been assistant Professor of Civil Engineering at St. Louis University in Missouri since 1968.

EDWARD PIERS, *BSc* '59, has been awarded an Alfred P. Sloan Foundation of New York fellowship. An Associate Professor of Chemistry at the University of British Columbia since 1965, Dr. Piers is one of 76 North American scientists to win the award.

A former Port Arthur man, J. E. SOREL, *BSc (Eng)* '59, has been appointed manager of Ontario Hydro's Algoma area, with headquarters at Blind River.

'61

A new post for JOHN LYNDON, *LLB* '61, is Vice-President of the Toronto Stock Exchange Market Services. In situations where problems develop in the market, he has the power to halt or suspend trading in any of the 1,150 issues listed on the TSE.

G. D. LUTWICK, *PhD* '61, is in charge of the organic and analytic organic chemistry section of the Nova Scotia Research Foundation.

Education is both a fascinating and a frustrating business, says FERN TETLEY, *BEd* '61, *MEd* '64, who describes her job as "seeing that things run smoothly." Miss Tetley is Administrative Assistant for the Red Deer Public School System.

'62

CAROL ANN COWELL, *MD* '62, is the first recipient of a \$50,000 medical fellowship placed by the Canadian Life Insurance Association. Dr. Cowell will conduct her research at the University of Toronto

and will investigate the growth, development, and psycho-sexual maturing of children and adolescents.

A. R. KNIGHT, *PhD* '62, has completed a text book on physical chemistry for life-science students. *Introductory Physical Chemistry* will be distributed in Canada, the United States, and other English-speaking countries.

'64

DONALD G. ENGELSTAD, *BSc (Eng)* '64, has joined the research staff of Shell Development Companies at the Emeryville Research Centre in California.

The history of PATRICK (RICK) CAMPBELL, *BSc (Pharm)* '64, is still a short one, but it spells nothing but success. At 27 he is one of the youngest businessmen in Grande Prairie.

A research officer with Atomic Energy of Canada at Chalk River for the past two years, A. O. OLSON, *BSc (Ag)* '64, has been appointed Superintendent of the Provincial Horticultural Station at Brooks, Alberta.

GEORGE J. PEDERSEN, *BSc* '64, has been appointed Director of the Research Branch of the Saskatchewan Medical Care Insurance Commission.

The appointment of JAMES F. STANDISH, *BSc* '64, *MSc* '66, as Master Feeds Nutritionist has been announced by Maple Leaf Mills Limited.

'65

Young and chic JANICE BUXTON, *BA* '65, says "rules are out, quite out" in her course on mod fashions at the YWCA in Montreal. As Creative Co-ordinator for J. R. McCann Promotions and a former fashion copywriter, Janice has had plenty of opportunities to work with clothes and decide what they can and can't do for a woman.

C. D. CALDWELL, *BSc (Ag)* '65, has been appointed Agricultural Secretary at the Canadian Embassy in Tokyo. He will be responsible for Canadian farm and food products sales in Japan, Canada's third largest market for agricultural products.

JOHN BUTLER, *BMus* '65, *MMus* '69, and his bride of last fall, JUDITH SHORT, *BMus* '69, both are continuing their music studies in Mozart's home town, at the University of Salzburg. Judith will carry on her study of the harp (which stands as tall as she does), and John will study choral conducting. Both majored in piano in their studies here.

One day in June was full of surprises for KENNETH LYLE WARD, *BEd* '65, Principal of Parkland Composite High School in Edson, when close to 400 of his students gave a rousing farewell to "the neatest guy around." The whole afternoon of activities took him completely by surprise, especially the dunking in the town swimming pool. Mr. Ward joined the University staff last fall as Assistant Professor of Educational Administration.

'66

A former member of the Golden Bears' hockey team, D. J. FRANCIS, *BSc* '66, *MSc* '68, has been appointed a two-year post-doctoral fellow at the Institute for Advanced Studies at the Australian National University in Canberra. He will study reaction mechanism of transition metal complexes there.

ALEC C. KERFOOT, *BSc (Eng)* '66, is helping to operate the Western Baptist Mission's radio station in La Paz, working with and under the direction of the local Bolivian church. Mr. and Mrs. Kerfoot say they are adjusting nicely to their new life in South America.

JACOB K. KROEKER, *BA* '66, has been awarded a Master of Divinity degree from Southern Baptist Theological Seminary in Louisville, Kentucky.

'67

PHILIP COVE, *BA* '67, has been appointed Fundy National Park Operations Manager.

Now studying towards a PhD in biology, WAYNE DWERNYCHUK, *BSc* '67, *MSc* '68, has been awarded a National Research Council postgraduate scholarship at the University of Saskatchewan.

'68

A new pepper variety named Castle, developed at the Alberta horticultural station at Brooks, is gaining gradual acceptance from fresh vegetable growers in the Medicine Hat area. This latest Canadian variety was developed by a Hungarian immigrant, STEVAN MOLNAR, *MSc* '68, vegetable researcher at the Brooks station.

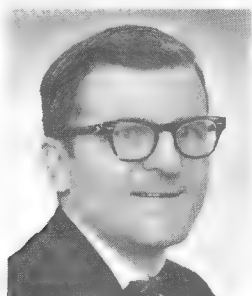
Captain GEORGE C. NAYLOR, *MEd* '68, Director of Canadian Forces School of Music at Esquimalt, British Columbia has been awarded an International Nickel Company of Canada Limited Fellowship in Educational Administration.

Next year should be "a lot of fun" says JACK ROOTMAN, *MD* '68, as he prepares to leave for Europe with a fellowship from the E. A. Baker Foundation of the Canadian National Institute for the Blind. Dr. Rootman will study at the Institute of Ophthalmology in London.

'70

Doing a county history for Mountain View, Alberta is the project of BODIL HENSEN, *BA* '70.

Mr. Lyndon



The University's graduates and friends are encouraged to keep in touch with the Alumni Association. If you are able to help organize alumni activities—in Edmonton or another centre—please let us know. Tell us about your personal doings too.

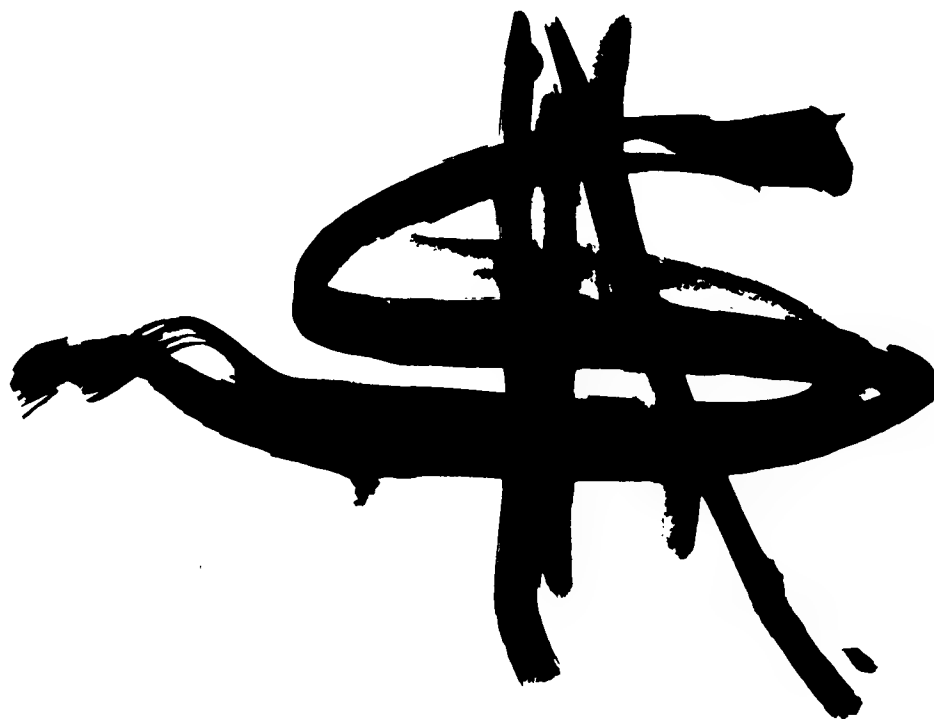
Write or telephone (432-3224) the Alumni Association (collect) at the University.

When Alberta's graduates are mentioned in NEW TRAIL, their degrees and graduating classes are listed after their names. Many also have degrees from other universities, but these are not generally shown.

Henry Hudson didn't discover Hudson's Bay Scotch.



But you can.



Dollars delivered
when most needed

The Canada Life Assurance Company



Homecoming '71 October 1, 2, and 3

The Alumni Association's annual Homecoming festivities include a wine and cheese tasting party Friday night and a banquet and ball Saturday night. All the University's graduates are invited, especially those from the golden and silver anniversary classes of '21 and '46 and the special anniversary classes of '51 and '61.

Art McCalla

(Continued from page twenty-one) In my view that is the only truly effective leadership that can be exercised in a university, which is still (and I know all that can be said to the contrary) a community of scholars. It is, in my opinion, Art McCalla's supreme achievement that he could exercise that kind of leadership.

What is not immediately apparent, and what may at first surprise many people who have had only cursory contact with him, is that he is a visionary. A rational visionary, to be sure, but a visionary nevertheless. For he has an exalted concept of what a university should be, of what its obligations are, how it should contribute to the advancement of learning, and indeed to the development and the well-being of society at large.

Although he is as deeply-rooted in Alberta as a man can be (a graduate, in fact, of this University, where he received a Bachelor of Science degree in Agriculture in 1929 and a master's degree two years later), he is the least parochial of men. His interests in public affairs, and particularly in the processes of education, are global. As a long-time member of the Commonwealth Scholarships Committee, his influence has been deeply felt in Canada's contribution to at least one area of foreign aid and foreign relations, and students in virtually every part of the world can testify to the interest he has shown them and the help he has given them.

Because he had a most distinguished career as teacher and research scientist, he has also a proper sense of the role and function of a university administrator. For though he has occupied top administrative positions as Head of the Department of Plant Science, Dean of Agriculture, Dean of Graduate Studies, and Acting Vice-President (Academic) for more than a quarter of a century, he has never lost sight of the fact that administration is not an end in itself, but exists only to make possible the whole enterprise of learning. I have known few men less rule-bound, and more ready to change administrative practices in order to facilitate the centrally important activities of teaching and research.

In order to set his performance as a university administrator into proper perspective, I must say something about his achievements as a scientist, although I must here rely on the views of colleagues who can speak with authority about that aspect of his work. It is their consensus that Art McCalla's major scientific contribution has been in the field of physical chemistry and in the biochemistry of cereal proteins. Numerous publications by him and his students attest to his accomplishments in this area. The work he did was of fundamental importance in explaining the complex structure of wheat protein and its role in bread-making. Much of this work was done in the thirties and forties, but was continued through the fifties and into the early sixties largely by

graduate students and post-doctoral fellows working under his direction. During the earlier period he was also involved in comparative studies of the production and quality of cereal crops in the different climatic soil zones of Alberta, and during World War II he participated in a National Research Council project involving the study of the feasibility of producing glycols for synthetic rubber from microbial fermentation of grain.

His scientific contributions were recognized when he was elected a Fellow of the Royal Society of Canada in 1954, and a Fellow of the Agricultural Institute of Canada in 1960.

As Dean of the Faculty of Agriculture he fostered the fundamental aspects of science and strove to make the Faculty a centre of academic excellence that would be internationally recognized. At the same time he never lost sight of the practical needs of agriculture. He perceived clearly, at a time when it was certainly unpopular, indeed almost heretical, to voice such sentiments, that agriculture was entering a period of transition and of great change, and that the time when farming could be considered as somehow a superior way of life quite apart from the hard facts of economics was gone, and he said so with characteristic directness and courage. It was not a position designed to court popularity in the 1950's, particularly in a province like Alberta, which was then still predominantly agricultural, but then popularity has never been something that he sought at the expense of more important things: to search for truth, to express the conclusions he had reached as clearly as possible, to strive for integrity in all his dealings. He has sometimes stepped on sensitive toes, no doubt, but all in all he has been one of the most respected and admired men this University has produced.

When he was asked to become the first Dean of the newly-established Faculty of Graduate Studies in 1957, he was, by administrative experience and deep understanding of the nature of advanced scholarship and research, ideally suited to assume the position. Not that everyone thought he was making a wise decision when he accepted. For he was relinquishing the deanship of a well-established, internationally recognized faculty to assume the leadership of a faculty whose potential was quite unknown and whose prospects for success were uncertain.

When Art McCalla became Dean of Graduate Studies in 1957, a total of 250 students were registered in graduate programs, and in his first year as Dean 62 graduate degrees were awarded, including six PhD's. Twelve years later, 2,790 students were registered in graduate programs, nearly fifty departments were offering degree programs at the doctor's level, and the University awarded, in the year 1969-70, 577 graduate degrees, including 153 PhD's. Art McCalla would be the last person to equate quantity with quality, but the figures do give a clear indication of the tremendous development that has taken place during his

tenure as Dean of the Faculty of Graduate Studies.

His part in helping to shape the development of advanced graduate work at The University of Alberta is legendary. The leadership he gave was truly inspired. He battled (and how he battled!) to get the necessary money to create, through the establishment of fellowships, scholarships, bursaries, and various kinds of assistantships, a system of support for graduate students at a time when competition for such students was extremely keen throughout North America. He lent powerful support to departments in their search for truly distinguished staff members. His standards of scholarly excellence became the standards departments attempted to attain. Though he was himself a scientist, he did not favor the science departments, but strove always to make the University an institution in which the humanities and social sciences had their proper place, and to this end he threw his full energies behind the effort to make the Library truly distinguished.

His overall contribution to The University of Alberta is incalculable. His influence has been felt at every level of the University's life, is embodied in virtually every major academic decision that has been made in the last ten years. The stamp of his personality is everywhere.

It is hard to believe that he will soon be reaching the statutory retirement age, for his mind is as vigorous, as clear, as incisive as ever. But as I told him the other day, I know several people across Canada who are now scheming (if that's the right word) how he might be persuaded to go on making a contribution to the scholarly and intellectual life of this country. For we feel that such a *rara avis* should not be allowed to rest on laurels, however well-earned.

On (and off) the Trail

(continued from page one) no longer exist; the others have not invited me back. I was a cheerleader (or something) during an election campaign in 1962, and we toured all the residences at mealtime. Hot rolled oats for breakfast in Athabasca Hall. Cabbage rolls and liver at St. John's Institute on Whyte Avenue. Stew at St. Joseph's College. Water bombs from the unsympathetic as we entered St. Stephen's College. A lot of giggling and not much to eat at the women's fraternities.

The old Education Building (now Corbett Hall), had a big, auntie's kitchen sort of place that has been replaced by a few vending machines and some oddly bright arborite. The old Giuseppe's (near 85 Avenue) has moved down the street and up in price. The wreckers found the Tuck Shop was built out of old coffee cans and memories, and the Hot Caf of not much more.

The list is endless.

Allan Welsh and Company

Accredited Public Accountants
Computerized Accounting

Telephone 422-8745 309 Northgate Bldg.
422-8742 10049 Jasper Ave.
Edmonton, Alta.

The City of Edmonton

It is indeed a pleasure for me, on behalf of The City of Edmonton, to bring greetings to all the Alumni of The University of Alberta through New Trail.



Ivor Dent

Ivor Dent
MAYOR

Compliments of

ALBERTA SULPHATE Limited

Edmonton, Alberta

Manufacturers of
Sodium Sulphate (Saltcake)



Alumni hours
at the
Winslow and
Christian
Hamilton
Memorial
Swimming
Pool,
The University
of Alberta

Saturday and
Sunday, noon
to 5 p.m.
(children, 1 p.m.
to 3 p.m.)

THE ALUMNI ASSOCIATION

EXECUTIVE COMMITTEE

<i>Honorary President</i>	MAX WYMAN, <i>BSc '37</i> (President, The University of Alberta)
<i>Honorary Secretary</i>	ALEX D. CAIRNS, <i>BA '38</i> (Registrar, The University of Alberta)
<i>President</i>	NORMAN A. LAWRENCE, <i>BSc (Eng) '41</i>
<i>Vice-President</i>	C. A. KOSOWAN, <i>BA '50, LLB '51</i>
<i>Past-President</i>	C. LES USHER, <i>BSc (Ag) '49</i>
<i>Executive Secretary</i>	ALEX G. MARKLE, <i>BA '48, BEd '62, MEd '59</i>

CYRIL J. McANDREWS, *BSc (Ag) '50*
W. A. D. BURNS, *BA '51*
W. J. ASTLE, *BCom '46*
W. MELVIN TASKEY, *BSc '54, DDS '56*
D. J. CORSE, *BEd '51*
RALPH N. McMANUS, *BSc (Eng) '42, MSc '46*
DONALD R. STANLEY, *BSc (Eng) '40*
Miss EVANGELINE MacDONALD, *BSc (HEC) '57, BEd '59*
E. G. KIDD, *BSc '43, MD '45*
Mrs. OLIVE HAMILTON, *Dip Nurs '43*
A. J. ANDERSON, *BSc (Pharm) '41*
LEE S. FAIRBANKS, *BEd '54, MA '66*
CAMBY GILLESPIE, *BSc (Ag) '36*
HARRY P. CHOMIK, *BEd '50, BA '56, MEd '64*
BOB EDGAR, *BSc (Pharm) '55*
Mrs. ANN CORNETT, *BSc (HEC) '36*
Mrs. URSULA VON MAYDELL, *BSc '60, MSc '63*
Mrs. MARGA PITTMAN, *Dip DH '66*
Mrs. ELIZABETH SCHWOB, *BA '44*

BRANCHES

CALGARY—Chairman, CAMBY GILLESPIE, *BSc (Ag) '36*,
2641 - 5 Avenue N.W., Calgary; Secretary,
KEN OLIVER, *BSc (Pharm) '54*, 3408 Cascade Road, Calgary.

CAMROSE—Secretary, Miss MARGIE McRAE, *BSc '43*,
4710 - 47 Street, Camrose.

CENTRAL ALBERTA—President, Mrs. ANN CORNETT, *BSc (HEC) '36*
4416 - 43 Avenue, Red Deer;
Secretary, MORRIS FLEWELLING, *BEd '64*,
4126 - 35 Street, Red Deer.

DENTAL ALUMNI ASSOCIATION—President, W. M. TASKEY, *BSc '44*,
DDS '56, 505 Tegler Building, Edmonton.

GRANDE PRAIRIE—President, PAUL LEMAY, *BSc '63*,
MSc '65, 10129 - 113 Avenue, Grande Prairie.

MEDICAL ALUMNI ASSOCIATION—President, G. S. BALFOUR, *MD '43*,
430 Mayor Magrath Drive, Lethbridge.

MEDICINE HAT—President, JACK ARMSTRONG, *BCom '49*,
158 Cochrane Drive N.W., Medicine Hat; Secretary,
B. KRASNOFF, *DDS '43*, 250 - 4 Avenue S.W., Medicine Hat.

MONTREAL—President, J. R. FLUMERFELT, *BCom '42*, District
Manager, London Life Insurance Co., 630 Dorchester Boulevard,
Montreal.

NURSES' ALUMNAE ASSOCIATION—President, Mrs. PATRICIA HAUGEN,
Dip Nurs '57, 11740 - 37 Avenue, Edmonton.

OTTAWA—President, BRIAN WATSON, *BA '64*, No. 14, 130 Woodridge
Crescent, Ottawa; Secretary, Mrs. JILL BODKIN, *BA '63*,
285 A Clemow, Ottawa.

REGINA—Chairman, Mrs. RUTH M. HARGRAVE, *BA '33*
3525 - 17 Avenue, Regina.

ROCHESTER, MINNESOTA—Registrar, GEORGE D. MOLNAR, *BSc '49*,
MD '51, Mayo Clinic, Rochester, Minnesota.

SASKATOON—Chairman, PETER D. RITCHIE, *BSc '49*,
No. 803, 105 - 21 Street E, Saskatoon.

TORONTO—President, ROBERT B. N. LINDSAY, *BCom '54*,
22 Glentworth Road, Willowdale 427, Toronto; Registrar, Mrs. F. J.
HEATH, *BA '38*, 284 Dawlish Avenue, Toronto 317.

VANCOUVER—President, Mrs. SHEILA G. MAXWELL, *BA '48*,
4550 West 7th Avenue, Vancouver; Secretary, Mrs. SHEILA
ROBERTSON, *BSc '45*, 1810 Rosebery, West Vancouver.

VEGREVILLE—President, HARRY P. CHOMIK, *BEd '50, BA '56, MEd '64*,
4334 - 41 Street, Vegreville.

VICTORIA—President, GEOFF BUCK, *BSc (Eng) '58*, 3908 Benson,
Victoria; Secretary, Mrs. ALICE BREWER, *BSc (HEC) '27*,
2629 Peatt, Victoria.

WESTLOCK—Chairman, BOB J. EDGAR, *BSc (Pharm) '55*,
Box 990, Westlock.

WINNIPEG—Chairman, A. M. LARSON, *BSc (Ag) '49*, 526 Manchester
Blvd., Fort Garry 19; Secretary, MARVIN SEALE, *BSc (Ag) '48*,
MSc '51, 195 Lyndale Drive, Winnipeg 8.

CAMPAIGN REPORT

Trying a telethon

"The idea with a telethon," explained Fund Development Officer LORNE MacPHERSON, "is to personalize the appeal, to get people really involved." The telethon, tried on a small scale this year as a kind of experiment, involved a handful of alumni volunteers telephoning other alumni in the Edmonton area, soliciting pledges for donations. "Ideally you get volunteers to telephone people from their own faculty and year," said Mr. McPherson, "but in the limited telethon we were trying this year we just weren't able to do that."

The appeal by letter will be sent as usual to all alumni, because the test telethon was intended to reach only a few hundred local residents.

"Telethons have worked extremely well for other universities all over the United States, and in Canada too, especially for the University of Toronto," said Mr. McPherson.

"Depending on how well our test telethon is received, on the basis of feedback and a more successful Development Fund campaign, we intend to expand the operation next year. We have hopes of reaching thousands of alumni instead of hundreds, spreading out beyond Edmonton and even Alberta. Naturally this means getting a lot more volunteers to do a lot more telephoning, not just here but in other centres too."

"Mind you," grins MacPherson, "from the volunteers' point of view a telethon isn't all work. . . ."

Chairman for annual appeal



Edmonton lawyer JACK JOYCE, BA, LLB '52, is the 1971 Chairman for the annual appeal to alumni. Here Mr. Joyce is surveying work on the new Law Centre being built in North Garneau. The Law Centre, which should be finished in time for fall term, is one of the many projects which are helped by the Development Fund.

ENCYCLOPAEDIA BRITANNICA

c/o NEW TRAIL, THE UNIVERSITY OF ALBERTA

Gentlemen: Please send me, free and without obligation, your colorful Preview Booklet which pictures and describes the new 200th Anniversary Edition of Encyclopaedia Britannica in full detail--and complete information on how I may obtain this magnificent set, direct from the publishers, through your group offer.

PLEASE PRINT

Name

.....

.....

Signature (Valid only with your signature)

B U S I N E S S R E P L Y C A R D

No postage necessary if mailed in Canada
Eight cents postage will be paid by

NEW TRAIL
The University of Alberta
Edmonton 7, Alberta

Encyclopaedia Britannica Offer

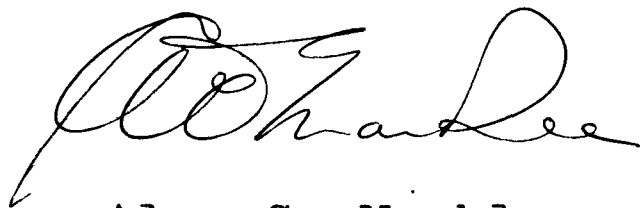


To our readers:

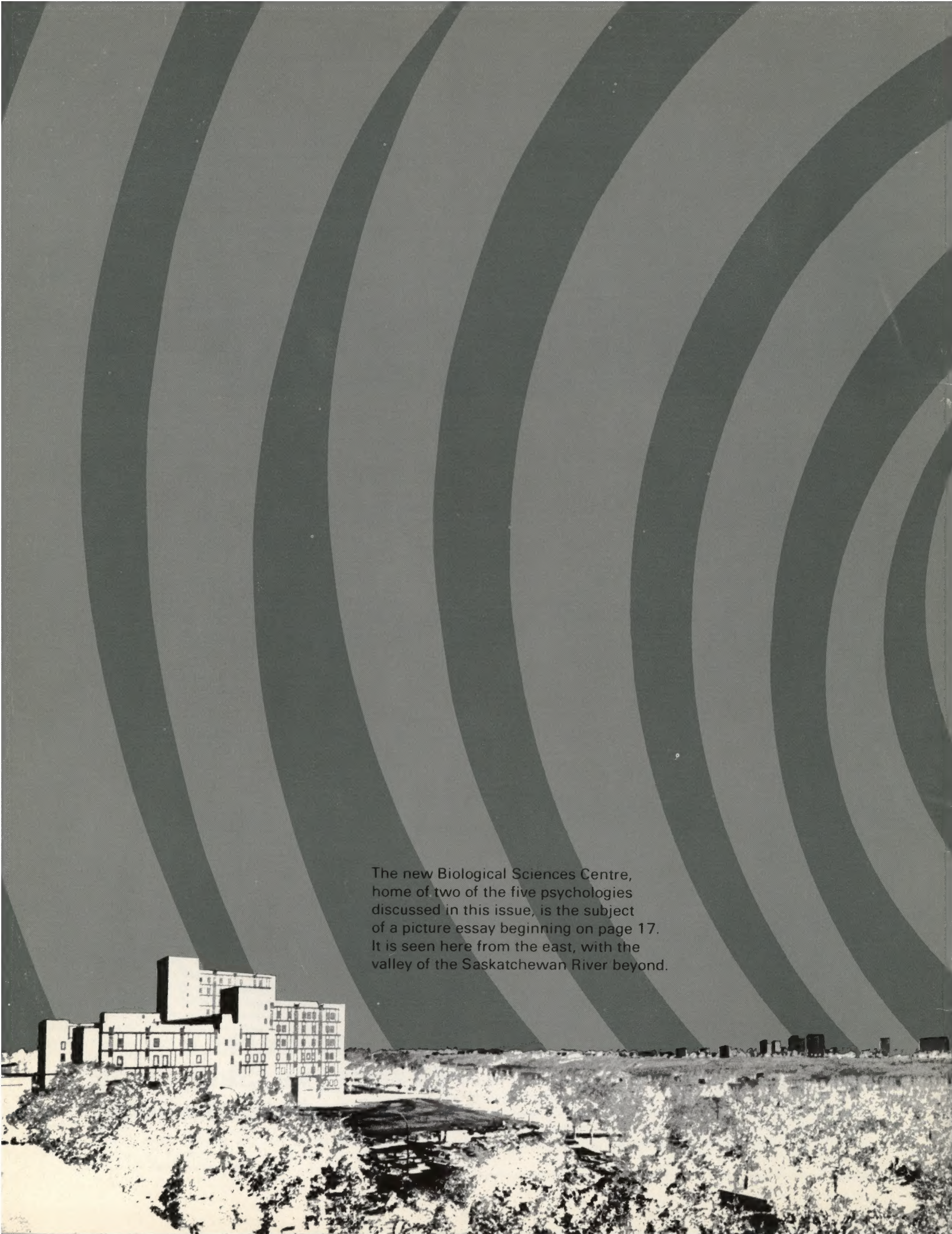
We are pleased to announce that the Two-hundredth Anniversary Edition of Encyclopaedia Britannica is available at a reduced rate to alumni, staff, and friends of The University of Alberta. The terms include a considerable saving over the retail subscription price at which Britannica is sold.

As you know, Britannica is not available through normal retail outlets, and this plan permits NEW TRAIL to pass on to its readers the benefits which this plan offers.

If you are interested in receiving further details about the plan, fill out the enclosed post card and return it to NEW TRAIL, The University of Alberta, Edmonton, Alberta..

A handwritten signature in cursive script, appearing to read 'A. G. Markle', written in dark ink.

Alex G. Markle
Executive Secretary
Alumni Association



The new Biological Sciences Centre,
home of two of the five psychologies
discussed in this issue, is the subject
of a picture essay beginning on page 17.
It is seen here from the east, with the
valley of the Saskatchewan River beyond.